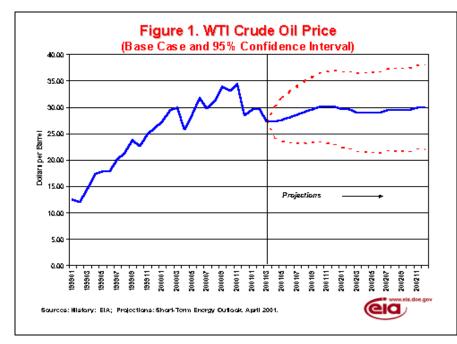


■ Short-Term Energy Outlook

April 2001



Overview

Signs of continued slowing in the U.S. economy have resulted once again in a reduction in our base case assumptions concerning real GDP growth in 2001 and 2002. We now expect the economy to expand at a rate of 1.9 percent this year and by 3.4 percent in 2002. These lower estimates imply a cumulative reduction in the level of GDP in 2002 of 1.1 percent compared to our previous forecast. The weaker growth outlook combined with an upward revision in industrialized country oil inventories at the end of 2000 would have resulted in some weakening of the world oil price outlook but these factors have

been offset by OPEC's announcement of a second round of output cuts since January. In the near term, the net effect of the changes in world oil market conditions is that oil prices will be somewhat weaker than previously expected, but by the end of the year, average prices are expected to equal or exceed the levels projected last month (Figure 1). Crude oil and gasoline inventories remain below normal in the United States and are expected to remain so through the driving season and into the fall (Figure 2). Therefore, significant price volatility remains a salient feature of the Outlook.

A smooth transition into the driving season with minimal or no unplanned refinery outages or distribution bottlenecks should result in a calmer gasoline market than was in evidence last year. Average pump prices should be somewhat lower nationally than last year as well under such fortuitous conditions. However, relatively low gasoline production this past winter, high costs for reformulated gasoline blending components and sub-normal inventories going into spring are factors that raise the risk of short-term squeezes and price flare-ups in regional markets this summer (April 1 - September 30). Although we would not predict any specific price runups this summer, we do believe that the generally tight market conditions that are developing in the face of low stocks and increased demand will keep producer margins and thus consumer prices relatively high in any case. The slight decline expected for summer gasoline prices in 2001 (about 6 cents per gallon, or 4 percent) still leaves the summer gasoline price average at the second highest level of all time in nominal terms, and the second-highest level in real terms since the summer of 1990. EIA has provided detailed analysis of the summer gasoline situation in its Summer Gasoline Outlook for 2001.

As expected, natural gas in underground storage reached the lowest levels recorded by EIA at the end of the heating season (March 31). This development has set the stage for continued high spot and wellhead prices that will be sensitive to variations in summer weather conditions that would lead to high electricity demand and competition for gas needed for storage injections. Only sharply higher-than-expected production performance or a sharper-than-anticipated downturn in industrial activity this year will prevent

Figure 1. WTI Crude Oil Price



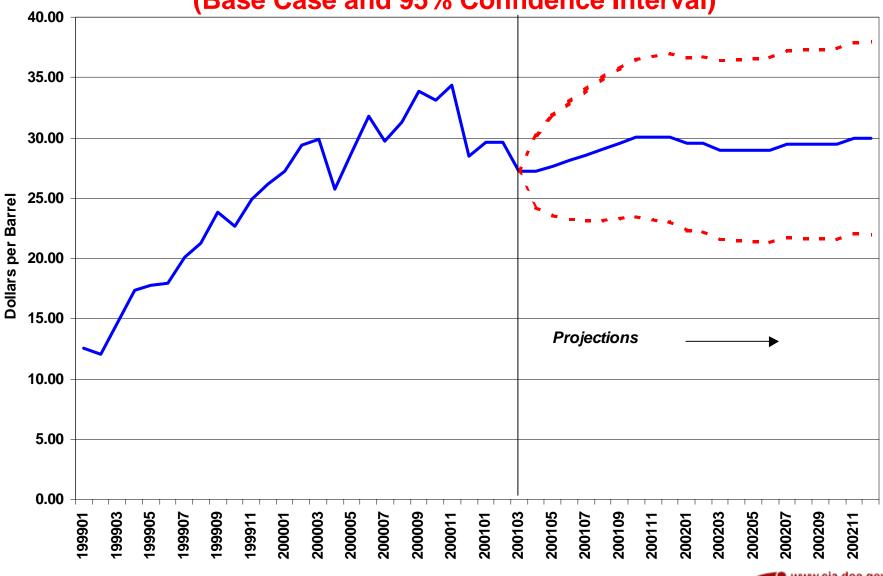
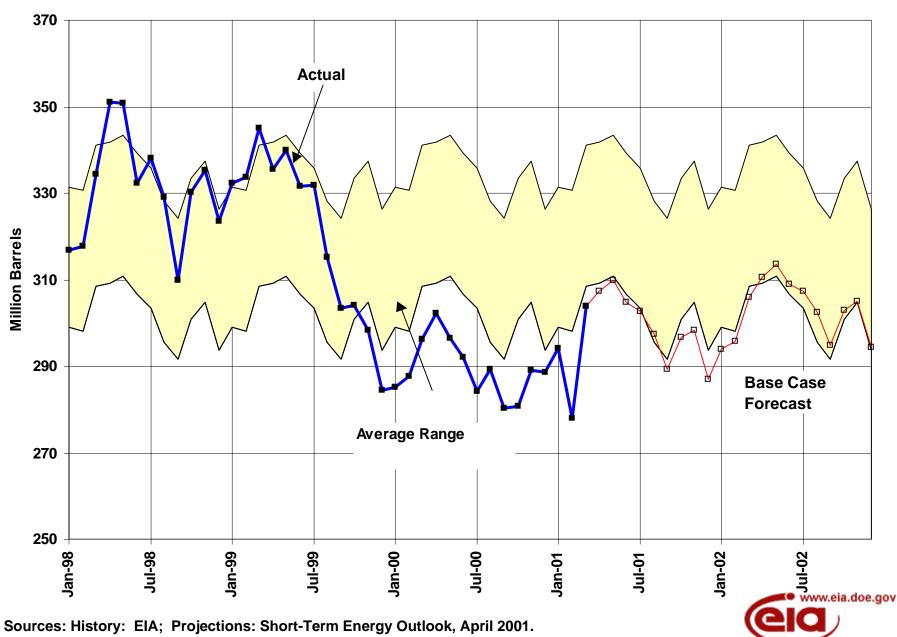




Figure 2. U.S. Crude Oil Stocks (Excl. SPR)



continued pressure on gas spot prices in the \$4 to \$5 range through the end of summer, in our view. Bolstering the strength of underlying gas demand are the expectations that hydroelectric and nuclear power availability this summer are likely to fall below levels seen during the summer of 2000 due to low winter precipitation rates and the intrusion of required maintenance. We expect, for example, that hydroelectric output in the Pacific Census Division (California, Oregon and Washington) will be about 8 percent below 2000 levels during the summer.

Summer electricity demand in 2001 is likely to exhibit somewhat slower growth than that seen last summer, partly because of the likelihood that cooling degree-days will be marginally lower this year but more importantly because a dramatically lower rate of growth in the economy is anticipated. We are currently pegging year-to-year growth in real GDP for the summer at 1.5 percent compared to a rate last summer that exceeded 5.5 percent. Any growth at all may strain power resources that are already near the limit, and the Pacific Region of the United States is a prime example of where this is an issue. The fact that California has already experienced blackouts in 2001 does not bode well for the chances of getting through the summer without serious power supply problems in at least one key area of the country. In California, summer (Q3) electricity demand typically exceeds winter (Q1) electricity demand by about 18 percent.

International

Crude Oil Prices The monthly average U.S. imported crude oil price in March was about \$24 per barrel (\$27 per barrel for West Texas Intermediate crude oil), approximately \$1.50 per barrel lower than February's average (Figure 1).

The OPEC basket price (roughly equivalent to the average U.S. imported crude oil price) also declined in March, falling as low as \$22.64 per barrel before rising slightly at the end of the month. Price declines during the past month had indicated weakness in the near-term market. With a 2 million barrels-per-day seasonal decline in demand expected at the end of the winter heating season, there were concerns within OPEC that action needed to be taken to keep the OPEC basket price near its target level of \$25 per barrel.

International Oil Supply

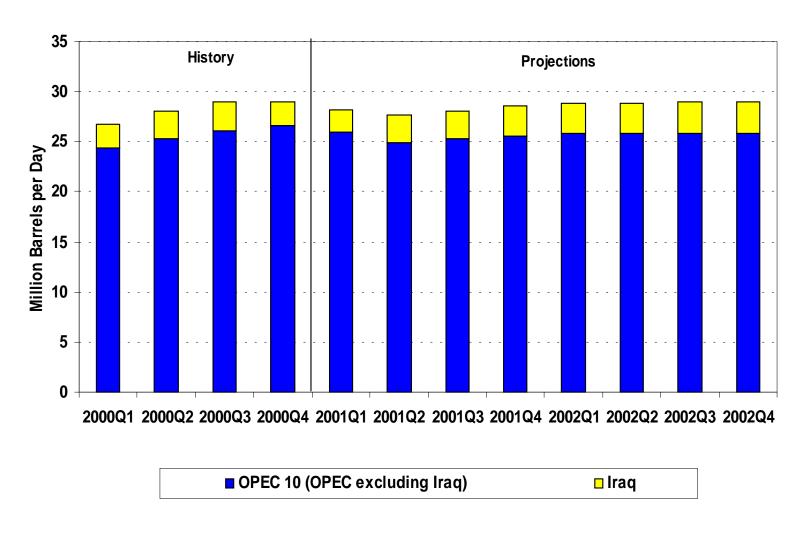
These concerns led the OPEC 10 (OPEC excluding Iraq) to cut their oil production quotas by 1 million barrels per day effective April 1. This quota cut came on the heels of OPEC's earlier roll back of 1.5 million barrels per day effective February 1.

EIA does not believe that further quota cuts are necessary to maintain the OPEC basket oil price even though OPEC members are estimated to have offset the previous quota cut to a large extent by producing above quotas. It is assumed that overproduction will continue with the new quotas, so that by mid-summer OPEC will be producing almost a million barrels per day above quota levels, effectively offsetting the new quota cuts entirely (Figure 3).

EIA's analysis indicates that the net effect of the new quotas, coupled with the expected continued overproduction, will be sufficient to support OPEC's desired prices for the OPEC basket. The seasonal decline in demand during the second quarter is necessary to support the seasonal stock build normally associated with this time of year. EIA expects that oil stocks, particularly in the United States, will continue to be tight compared to normal levels and will provide enough support to prevent prices from falling significantly.

Iraqi efforts to end U.N. sanctions have continued to result in lowered exports and production since December. Iraqi exports finally returned to last fall's levels of 2 million barrels per day in March after ranging from 0.6 - 1.2 million barrels per day for 4 months. It is assumed that Iraqi production in 2001 will not exceed the 3 million barrels per day level reached as recently as October 2000.

Figure 3. OPEC Crude Oil Production 2000-2002



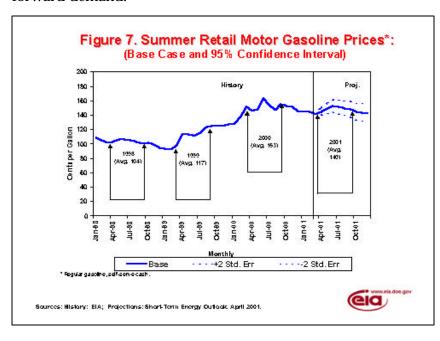


Outside of the OECD, non-OPEC production is expected to increase by another 0.7 million barrels per day in 2001, consistent with the previous Outlook. Although the Caspian Pipeline Consortium has begun filling its new pipeline to transport oil from Kazakhstan to world markets, this is not expected to support greater Caspian production levels until late 2001.

International Oil Demand. World oil demand is still expected to grow despite concerns over a gradual economic slowdown in the industrialized countries (Figure 4). However, EIA has lowered its projected world oil demand growth in 2001 by another 100,000 barrels per day from the previous Outlook, reducing world oil demand growth to 1.4 million barrels per day in 2001 and 1.5 million barrels per day in 2002. Besides OECD, non-OECD Asia is still expected to be the leading region for oil demand growth over the next two years.

World Oil Inventories. EIA does not attempt to estimate oil inventory levels on a global basis, however, the direction global oil inventories are headed is discerned from EIA's world oil supply and demand estimates. These estimates provide only a rough guide because of what has come to be known as the "missing barrels problem". The available limited data for tracking inventories suggest that inventories have not been building as fast as any of the global supply/demand estimates (including EIA's) would indicate, and that the inventory estimates are being overstated. As a result, inventories that would be expected using these supply/demand estimates are "missing" - most likely because the inventory estimates are being overstated.

The most reliable inventory data are from the OECD countries (although near-month estimates can be revised considerably). The data indicates that there was roughly a 100,000 barrels per day stockbuild in 2000 for these countries. OECD countries account for a little more than half of total world oil demand (Figure 5). However, EIA's global supply/demand estimates suggest that OECD inventories should have been building by almost 400,000 barrels per day in 2000. EIA's projections for OECD inventories are adjusted to reflect the assumption that the "missing barrels problem" will continue in 2001, but will be diminished by 2002. With this adjustment, OECD inventories are projected to grow relatively slowly in 2001 and 2002. EIA believes that this stock growth will be small enough to provide continued price support because inventories will continue to be low compared to levels required to provide normal coverage for forward demand.



U. S. Energy Prices

Motor Gasoline. Pump prices have been falling since last September. By the third week of March they averaged \$1.40 per gallon for regular unleaded self-service cash. Over the same time period, crude oil prices have declined by about \$5.00-\$6.00 per barrel, or about 12-14 cents per gallon. However, prices are expected to be heading back up as we enter the driving season. Offsetting the lower crude prices is the tightening of motor gasoline stocks, which are less plentiful now than they were this time last year (Figure 6).

Figure 4. Annual World Oil Demand (Change from Year Ago)

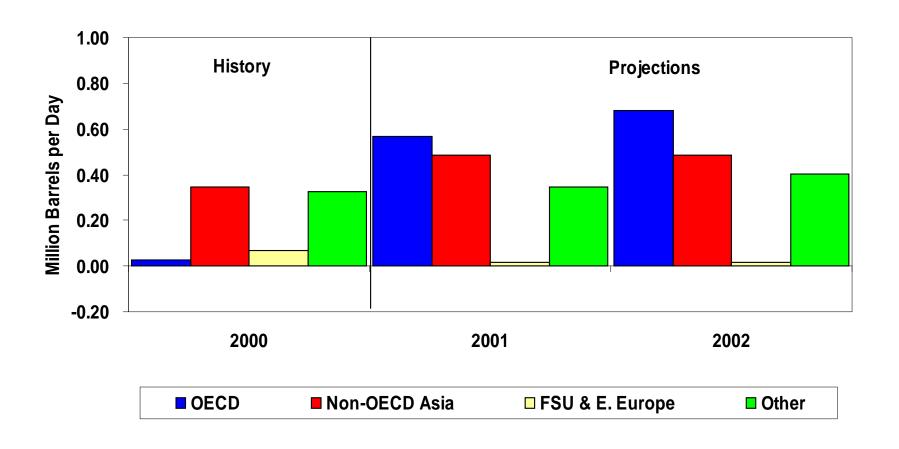
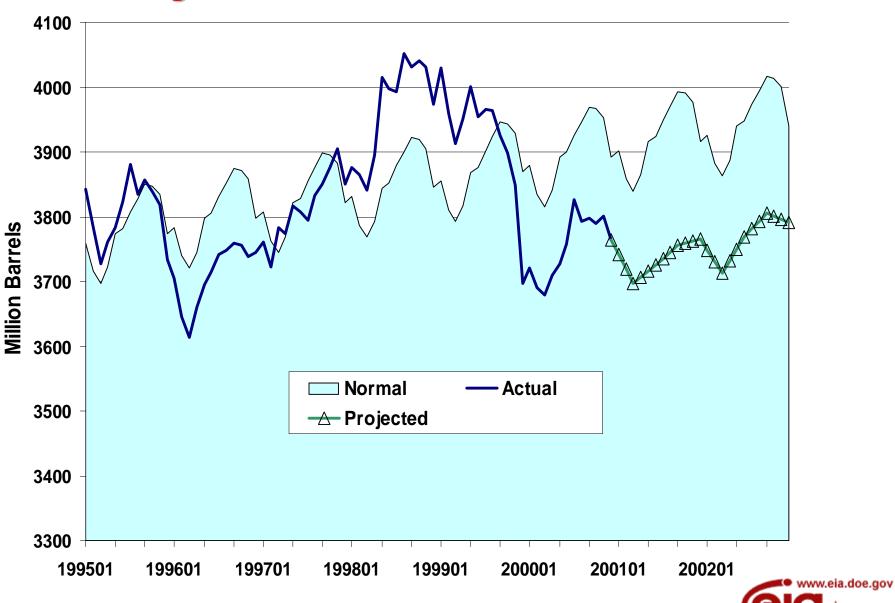
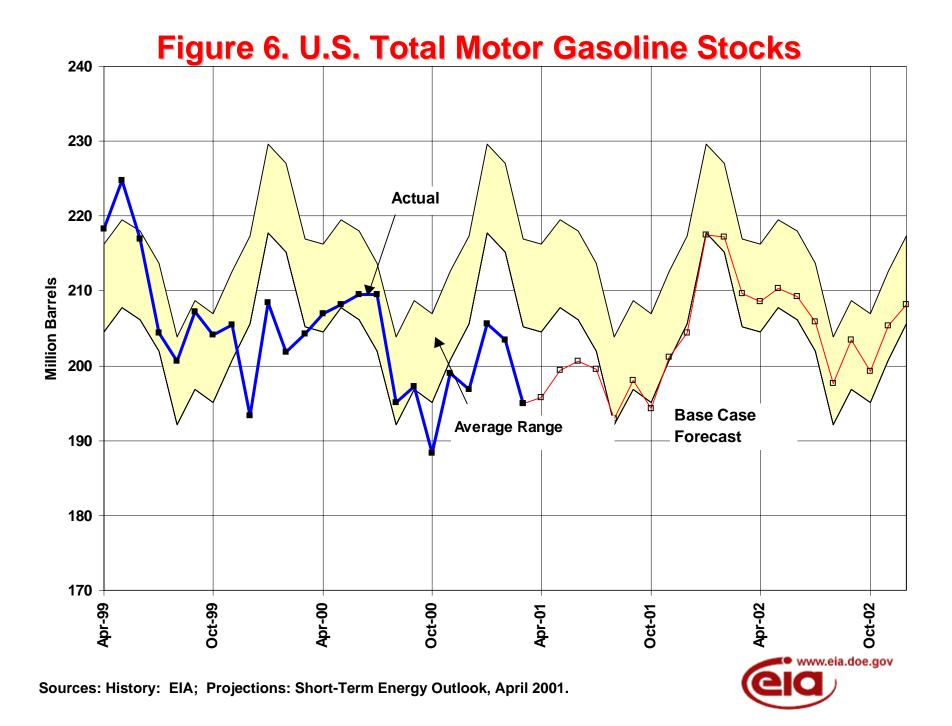




Figure 5. Total OECD Petroleum Stocks





As a result, we project that prices at the pump will rise to about \$1.52 per gallon (for regular unleaded self-service) during the peak months of the driving season (Figure 7). For the summer of 2001, we are projecting an average price of \$1.49 per gallon, compared to \$1.53 seen during the previous driving season. Last year, the high national average prices were skewed by exceedingly high pump prices in the Midwest (over \$2.00 per gallon at times), which, in turn, were the result of critical regional supply problems. Although in our base case we do not project a repeat of last year, the current situation of relatively low inventories for gasoline could once again set the stage for some regional imbalances in supply that could bring about significant price volatility in the U.S. gasoline market.

Distillate Fuel Oil (Diesel and Heating Oil). Like motor gasoline prices, retail diesel fuel oil prices have been sliding down from their winter peak of \$1.61 per gallon last September. But unlike motor gasoline prices, distillate fuel prices are expected to continue to ease during the driving season. First of all, now that the winter is over, there will be no heating oil demand pressures over the next several months. Furthermore, distillate stock levels at the end of March are about 11 percent higher than they were this time last year. Still, retail diesel prices continue to be fairly high in historical terms for the following reasons: demand for diesel fuel has been growing and continues to grow. In addition, demand for distillate fuel for electricity generation as a substitute fuel for the extremely high priced natural gas was somewhat higher than normal during the fourth quarter of 2000. We project that diesel fuel oil prices will bottom out at about \$1.40 per gallon during the summer, a drop of 20 cents per gallon from winter highs.

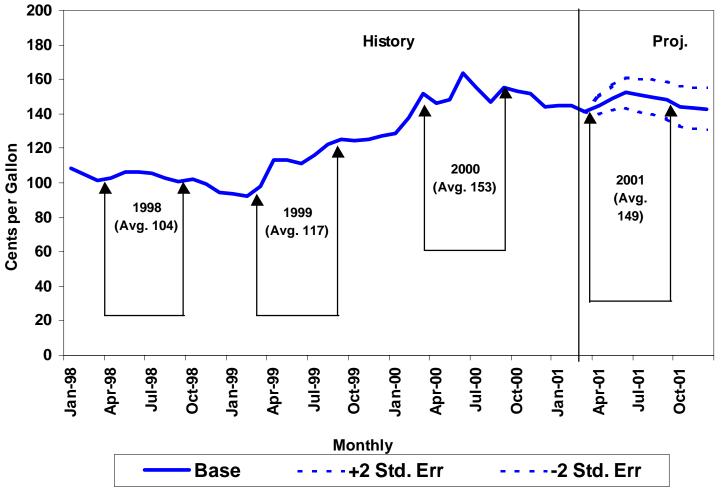
Natural Gas. Last winter (October 2000-March 2001) natural gas prices at the wellhead averaged about \$5.74 per thousand cubic feet, more than double the previous winter's price. Natural gas prices (Figure 8) began climbing last summer primarily in response to low levels of underground gas storage. Spot prices have remained at well over \$4.00 per thousand cubic feet since late June 2000, even topping \$10.00 per thousand cubic feet this past winter. The duration of these high gas prices is unprecedented. Moreover, we continue to believe that, given the current state of the natural gas market, it will be a while (if ever) before prices at the wellhead return to the low level of \$2.00 per thousand cubic feet experienced just one year ago. The chief basis for our view is our outlook for robust levels of gas demand growth over the next two years, particularly in the electric power sector. About 90 percent of the planned additions to electric generating capacity over the next few years are designed to primarily use natural gas as a fuel source. Although gas production and imports are expected to increase in the forecast period, we believe that the gains in supply will not be enough to bring the wellhead price down to the \$2.00-3.00 range in the short-term.

Residential prices for natural gas this winter were about 42 percent higher than last year during that period. Now that the heating season is over, average wellhead prices are projected to decline only moderately, averaging a robust \$4.52 per thousand cubic feet for the spring and summer. One factor keeping these prices relatively high is, once again, concern over the adequacy of injections into underground storage. The gas supply situation this injection season bears close monitoring. If the spring and summer weather is especially hot in regions that consume large quantities of gas-fired electricity, (California and Texas for example), then injections into underground storage for the next winter would again be strained, resulting once more in sharply rising prices from already lofty current levels. In 2001, the annual average wellhead price is projected to average over \$5.00 per thousand cubic feet. Next year, we expect the storage situation to improve modestly and with that, we expect a decrease in the average annual wellhead price. Increases in production and imports of natural gas needed to keep pace with the rapidly growing demand for natural gas will be accompanied, for the time being, by relatively expensive supplies for gas due to rising production costs and capacity constraints on the pipelines.

Electric Utility Fuels. The rapid rise in gas prices last summer and fall has pulled delivered gas prices above heavy fuel oil prices on a cost per Btu basis (<u>Figure 9</u>). As this situation is likely to persist, we anticipate some recovery in the amount of oil used for power generation over the very low levels seen since

Figure 7. Summer Retail Motor Gasoline Prices*:

(Base Case and 95% Confidence Interval)

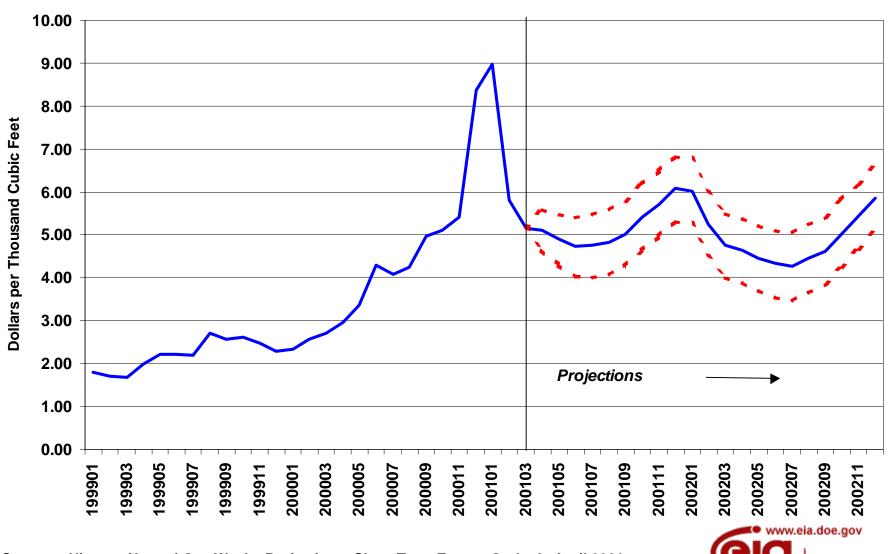


^{*} Regular gasoline, self-serve cash.

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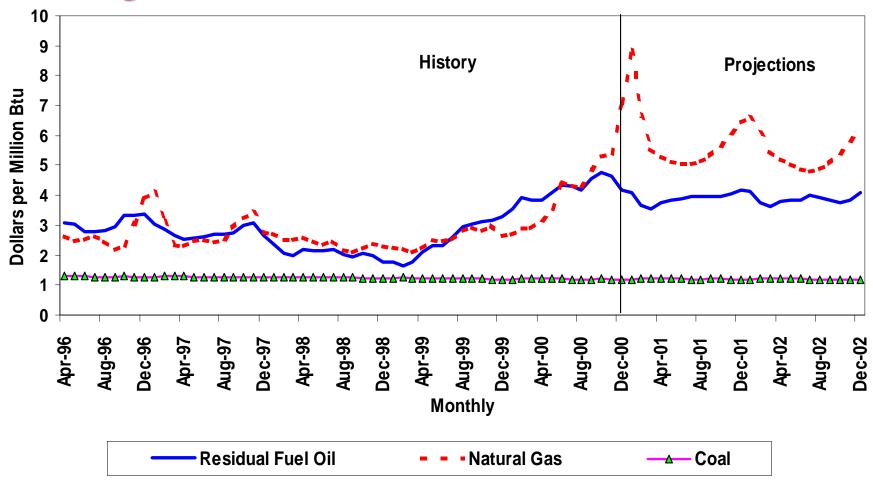
Figure 8. Natural Gas Spot Prices

(Base Case and 95% Confidence Interval)



Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, April 2001.

Figure 9. Fossil Fuel Prices to Electric Utilities





late 1999. In 2001, the cost of coal to electric utilities is projected to increase slightly, after years of slow but continual decline, as coal, like oil, is being used more intensively for electricity generation in lieu of expensive or unavailable natural gas. On an inflation-adjusted basis, however, coal prices should still show a decline this year.

U.S. Oil Demand

Petroleum products demand declined by an average 30,000 barrels per day year in 2000 (Figure 10). Despite robust economic growth and colder-than-normal fall weather, petroleum markets were susceptible to the effects of a record mild first quarter—the peak heating season—as well the substantial increase in oil prices that eroded demand during the second half of the year.

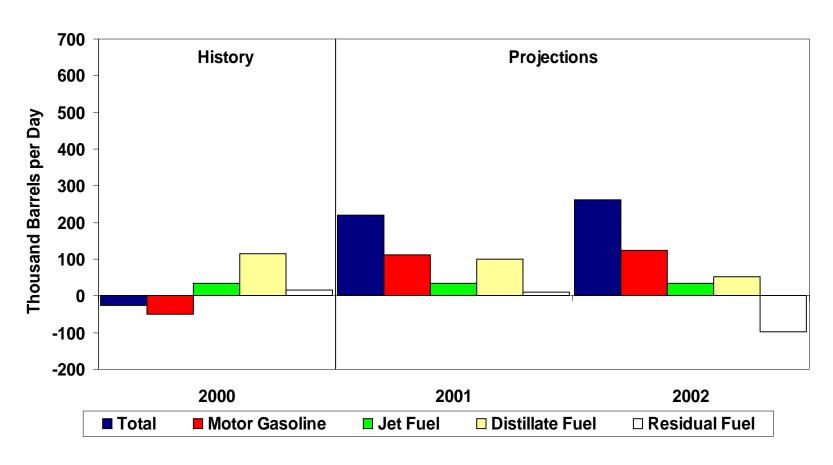
Motor gasoline demand in 2000 fell by 50,000 barrels per day, or 0.6 percent, reflecting a 0.4-percent decline in highway travel activity resulting from a 30-percent increase in retail motor gasoline prices. The bulk of the highway travel decline occurred in the latter part of the year as a result of earlier price increases and the moderation in economic growth. Despite a 10-percent hike in ticket prices in 2000, commercial jet fuel demand increased by 3.3 percent, but preliminary fourth-quarter data indicate substantial moderation in passenger and freight growth. *Total* jet fuel deliveries, which include corporate, military, and weatherrelated components, rose just 2.0 percent, down from 3.1 percent in the previous year. The record mild warm weather of the first quarter depressed shipments of jet fuel used as a blending component for heating oil in the northern states. Distillate fuel oil demand grew by 3.2 percent in 2000: transportation demand increased by almost 5 percent, but other sectors remained flat (industrial) or even declined (space-heating). Moreover, shipments to electric utilities, which had increased substantially in recent years, declined by 16 percent as a result of sharp fuel price increases. Residual fuel shipments, highly sensitive to changes in relative prices, fluctuated wildly during the year but remained unchanged for the year as a whole. Shipments to electric utilities declined by more than 20 percent, but combined commercial and industrial demand registered solid gains. Following a year of double-digit increases, the combination of slowdowns in petrochemical activity and mild weather resulted in a slight decline in the total demand for liquefied petroleum gas and oil-based petrochemical products.

During the forecast interval, total petroleum demand is projected to increase once again, but at rates slower than those projected in earlier Outlooks. The current economic slowdown, which began during the second half of 2000, is now projected to be deeper and longer than previously projected. Growth in real disposable income is now projected to register 2.5 percent in the current year before accelerating to 4.2 percent in 2002. Despite anemic economic growth rates, petroleum prices are still expected to decline slowly. (In fact, consumers can expect to see seasonal fluctuations in retail gasoline prices, with prices approaching previous summer's peaks during both summer seasons.) Weather patterns are assumed to exhibit normal seasonal patterns.

In this environment, total petroleum demand is projected to increase by an average of 240,000 barrels per day, or 1.2 percent, during the forecast interval. Reversing last year's declines, motor gasoline demand is expected to increase, but only at an average of 1.4 percent per year. Total jet fuel demand is expected to increase by an average 2 percent, with commercial demand rising by 3 percent. Distillate fuel demand is projected to rise by an average 2.0 percent, down from the 3.2-percent average of the previous 2 years, reflecting sharp slowdowns in the growth of industrial activity. Transportation diesel is projected to register a 2.5 percent growth rate, and space-heating demand is expected to recover slightly. Electric utility demand is expected to decline by a further 10 percent in the current year before leveling off in 2002. Residual fuel oil shipments are expected to increase slightly in the current year before declining to a new low of 760,000 barrels per day in 2002.

U.S. Oil Supply

Figure 10. Petroleum Products Demand (Change from Year Ago)





Average domestic oil production is expected to be relatively flat in 2001 and 2002 at a level of 5.82 million barrels of oil per day (Figure 11).

In the Lower-48 States, oil production is expected to decline by 55,000 barrels per day to a rate of 4.8 million barrels per day in 2001, and followed by a decrease of 11,000 barrels per day in 2002. Oil production from the Mars, Troika, Ursa, and Brutus Federal Offshore fields is expected to account for about 8.2 percent of the lower-48 oil production by the 4th quarter of 2002.

Alaska is expected to account for about 17 percent of the total U.S. oil production in 2002. Its oil production is expected to increase by 4.3 percent in 2001 and by 1.6 percent in 2002. The gain in 2001 is the result of adding two new satellite fields, Colville River (Alpine) and Prudhoe Bay (Aurora), which contributed to the Alaska North Slope production. Initial rates from Alpine averaged 67,000 barrels per day during January and it is expected to peak at 80,000 barrels per day in mid-2001, while Aurora peak production should occur later in the year. Another satellite field, North Star, is expected to come on in early to mid-2002 and will peak at a rate of 65,000 barrels per day by year's end. A substantial portion of the oil production from Alaska comes from the giant Prudhoe Bay Field. As a result of maintenance, better well work, more development drilling, and better coordination of occasional down time, this field's decline rate last year has changed from the usual 10 percent to only 3 percent per year. However, the field is expected to follow a steeper decline during this forecast period. Oil production from recent discoveries is expected to substantially offset the decline in oil production from the Prudhoe Bay field in the North Slope in 2001. Production from the Kuparuk River field plus like production from West Sak, Tabasco and Tarn fields is expected to stay at an average of 236,000 barrels per day in the 2001-2002 forecast period.

Natural Gas Demand and Supply

U.S. natural gas demand is expected to grow at about a 1.9-percent rate this year, following the strong 4.9-percent performance in 2000 (Figure 12). A slowing economy and less rapid demand growth in the industrial and commercial sectors are the reasons. Growth in 2002 is expected to heat up to about 3.4 percent as the economy picks up again and as new gas-fired power generation requirements continue to mount.

Domestic gas production for 2001 and 2002 is expected to rise as production responds to the high rates of drilling experienced over the past year. Production is estimated to have risen by 3.7 percent in 2000 and it is forecast to continue to increase by 2.7 percent rate in 2001 and 2.5 percent in 2002.

Based on information from the American Gas Association (AGA), approximately 190 billion cubic feet of gas (bcf) was withdrawn from storage in March. Based on this information, we estimate that, on an EIA survey basis, which is generally more comprehensive, working gas in storage at end-season (March 31) was 718 bcf (Figure 13). While this represents an improvement over previous estimates (and March spot prices softened some compared with those of the last 2 months) such an end-season level would still represent the lowest recorded by EIA and is 40 percent below the previous 5-year average. We estimate that net injection, between April 1 and October 31, would have to be about 363 bcf (21 percent) above average to bring working gas to average pre-season levels for next winter. We believe that only about 80 percent of the extra 360 bcf is likely during the injection season.

Net imports of natural gas are projected to rise by about 13 percent in 2001 and by another 4 percent in 2002. For this winter, we estimated that net imports were 11 percent higher than last winter's imports. For this summer, we project that natural gas imports will be 17 percent above last summer's as demand for storage refill is expected to be high.

Figure 11. U.S. Crude Oil Production

(Change from Year Ago)

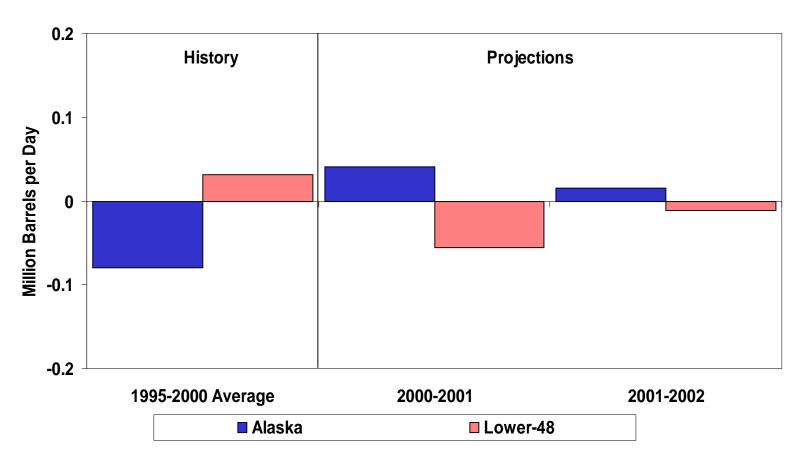
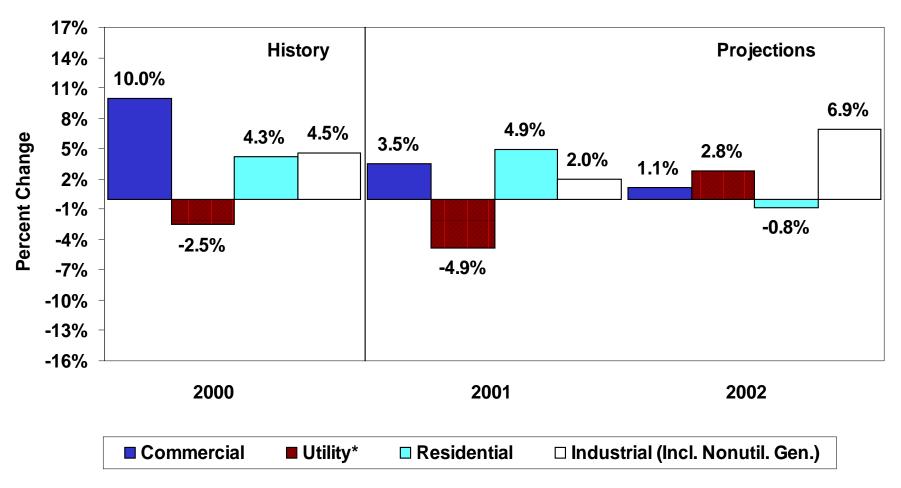




Figure 12. Natural Gas Demand by Sector

(Change from Year Ago)

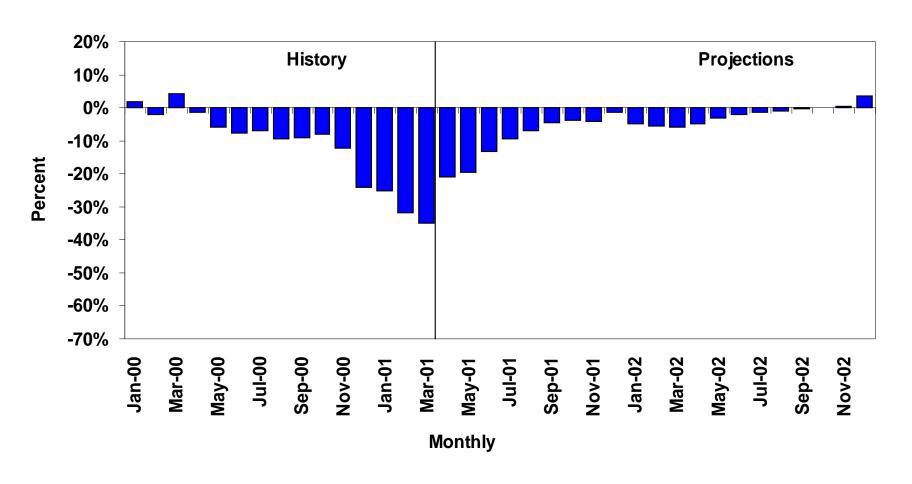


^{*} Electric utility gas demand changes in recent years in part reflect sale of assets to the nonutility sector



Figure 13. Working Gas in Storage

(Difference from Previous 5-Year Average)





Natural gas supply and deliverability problems in California for gas-fired electricity generation have helped to boost gas prices to electricity producers and other consumers. The situation in California is characterized by low gas storage, high demand and low hydropower availability. These supply problems are following on last summer's supply problems with no obvious end visible over the next two years. Average California gas prices dramatically outstripped prices elsewhere in the country through December but have since been coming down as weather-related demand has eased up somewhat. They are still considerably higher than in other key areas (Figure 14).

Electricity Demand and Supply

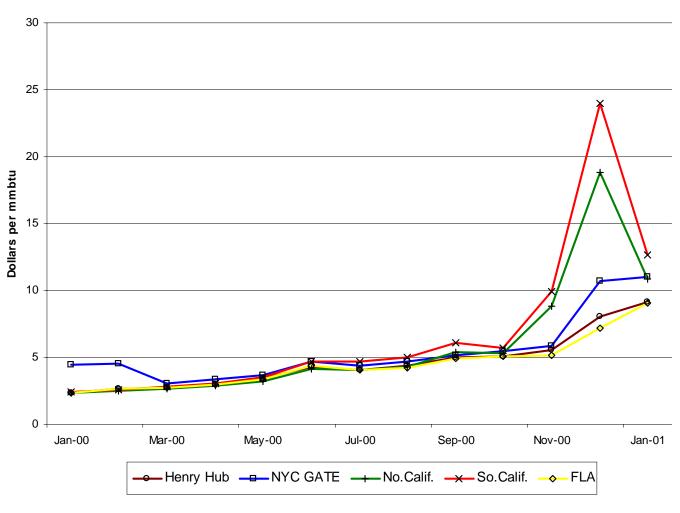
Total annual electricity demand growth (retail sales plus industrial generation for own use) is projected at about 2.3 percent in 2001 and 2.1 percent in 2002. This is compared with estimated demand in 2000 that was 3.6 percent higher than the previous year's level. Electricity demand growth is expected to be slower in the forecast years than it was in 2000 partly because economic growth is also slowing from its higher 2000 level.

This summer's overall cooling degree-days (CDD) are projected to be normal, or about 1.0 percent below last summer's CDD, which were well above normal. Summer electricity demand growth is expected to be 2.5 percent higher than last summer's based mainly on economic factors, i.e., rising GDP, albeit less rapid than last year, higher housing stocks and employment (Figure 15 and Table 10). Hydropower generation in the crucial Pacific Northwest is expected to be down by 7.5 percent from last summer, due mainly to lower water levels. According to the National Oceanic and Atmospheric Association (NOAA), this winter was the second driest winter on record, after the 1976/77 winter. In addition, the crisis in California this winter has further drained reservoirs, depriving the region of generation resources for this spring and summer. Nuclear generation is also expected to be 5.6 percent lower than last summer mainly due to scheduled maintenance outages.

In the fourth quarter of 2000, previously falling demand for oil-fired generation began to turn around as the price differential between natural gas and oil in the electricity generating sector shifted to favor oil, prompting those plants which can switch to oil to do so. Electric power demand for oil is projected to continue to rise through third quarter 2001. Although the favorable price differential for oil relative to gas is expected to continue through the forecast period, by the second half of 2001, expected increases in gas-fired capacity are expected to keep gas demand for power generation growing.

In California, widespread rolling blackouts occurred during the week of March 19 for the first time since January. Power was shut down for about 800,000 customers throughout the state, and outages lasted about 4 hours. The immediate cause of the blackouts was the unseasonably warm weather, in the high 80's, which caused air conditioners to be turned on. However, at the time more than one-third of the state's power generation was offline due to: routine or emergency repairs; because wholesale energy providers were not selling to the state's 2 utilities, which have been unable for months to pay them, and also because a transmitter fire brought down two large plants in Southern California. The Public Utility Commission in California has moved to allow sharp (over 40 percent) increases in consumer prices for electricity this year. Some reduction in usage is to be expected from the move, of course. However, the fact that capacity limits were reached during the winter does not bode well for California electricity markets this summer, when demand is much higher. Typically, California electricity demand is about 18 percent higher during the third quarter than it is during the first quarter, based on state-level electricity sales data reported to EIA for the period 1994-1999.

Figure 14.Comparison of Key Natural Gas Prices Monthly Average Delivered to Pipeline Prices in 2000



Source: Natural Gas Week



Figure 15. U.S. Electricity Demand by Sector

(Change from Year Ago)

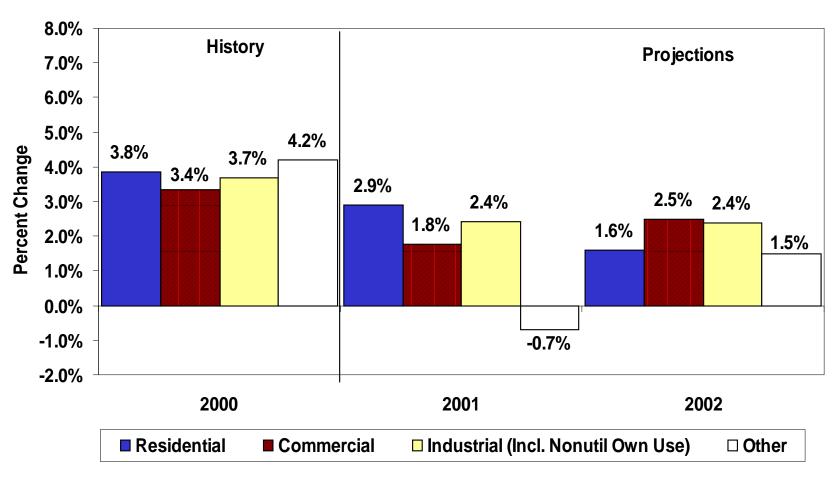




Table HL1. U. S. Energy Supply and Demand

3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	,	Year	Annua	I Percentage	e Change		
	1999	2000	2001	2002	1999-2000		2001-2002
Real Gross Domestic Product (GDP)		•			•	•	
(billion chained 1996 dollars)	8876	9320	9494	9818	5.0	1.9	3.4
Imported Crude Oil Price ^a							
(nominal dollars per barrel)	17.22	27.72	25.52	26.41	61.0	-7.9	3.5
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	5.88	5.83	5.82	5.82	-0.9	-0.2	0.0
Total Petroleum Net Imports							
(including SPR)	9.91	10.13	10.76	10.73	2.2	6.2	-0.3
Energy Demand							
World Petroleum							
(million barrels per day)	74.9	75.7	77.1	78.6	1.1	1.8	1.9
Petroleum							
(million barrels per day)	19.52	19.49	19.71	19.97	-0.2	1.1	1.3
Natural Gas		00 75	00.47		4.0	4.0	0.4
(trillion cubic feet)	21.70	22.75	23.17	23.96	4.8	1.8	3.4
Coal ^c							
(million short tons)	1045	1079	1086	1092	3.3	0.6	0.6
Electricity (billion kilowatthours)							
Retail Sales d	3312	3415	3470	3538	3.1	1.6	2.0
Nonutility Use/Sales ^e	185 3497	210 3624	237 3707	248 3786	13.5 3.6	12.9 2.3	4.6 2.1
Total	3491	3024	3707	3700	3.0	2.3	2.1
Total Energy Demand ^f							
(quadrillion Btu)	97.1	98.4	99.0	100.6	1.3	0.6	1.6
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1996 Dollar)	10.94	10.56	10.43	10.25	-3.5	-1.2	-1.7
Renewable Energy as Percent of Total ⁹	7.2	6.9	6.9	7.0			

^aRefers to the refiner acquisition cost (RAC) of imported crude oil.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; and Quarterly Coal Report, DOE/EIA-0121; International Petroleum Statistics Report DOE/EIA-0520; Weekly Petroleum Status Report, DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

^bIncludes lease condensate.

^cTotal Demand includes estimated Independent Power Producer (IPP) coal consumption.

^dTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates

^eDefined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 2000 are estimates.

[†]The conversion from physical units to Btu is calculated by using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review (MER*). Consequently, the historical data may not precisely match those published in the *MER* or the *Annual Energy Review (AER)*.

^gRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.

SPR: Strategic Petroleum Reserve.

Table 1. U.S. Macroeconomic and Weather Assumptions

		2000				2001				2002				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic ^a															
Real Gross Domestic Product	0400	0040	0074	0004	0.40.4	0.404	0540	0577	0007	0704	0070	0070	0000	0.40.4	0040
(billion chained 1996 dollars - SAAR)	9192	9319	9374	9394	9421	9461	9516	9577	9667	9764	9872	9972	9320	9494	9818
Percentage Change from Prior Year	5.3	6.1	5.3	3.4	2.5	1.5	1.5	1.9	2.6	3.2	3.7	4.1	5.0	1.9	3.4
Annualized Percent Change															
from Prior Quarter	4.7	5.5	2.3	0.9	1.2	1.7	2.3	2.6	3.7	4.0	4.4	4.1			
GDP Implicit Price Deflator															
(Index, 1996=1.000)	1.062	1.068	1.073	1.077	1.084	1.088	1.092	1.097	1.102	1.105	1.109	1.114	1.070	1.090	1.108
Percentage Change from Prior Year	1.8	2.1	2.3	2.3	2.1	1.8	1.8	1.8	1.7	1.6	1.6	1.6	2.1	1.9	1.6
Real Disposable Personal Income															
(billion chained 1996 Dollars - SAAR)	6443	6502	6541	6553	6597	6653	6701	6743	6835	6918	6990	7059	6510	6674	6950
Percentage Change from Prior Year	2.9	3.1	3.1	2.2	2.4	2.3	2.5	2.9	3.6	4.0	4.3	4.7	2.8	2.5	4.1
Manufacturing Production															
(Index, 1996=1.000)	1.216	1.239	1.251	1.267	1.255	1.253	1.256	1.261	1.270	1.284	1.299	1.313	1.243	1.256	1.291
Percentage Change from Prior Year	4.5	5.1	6.5	6.0	3.3	1.2	0.4	-0.4	1.2	2.5	3.4	4.1	5.5	1.1	2.8
OECD Economic Growth (percent) b													3.6	2.7	3.3
Weather ^c															
Heating Degree-Days															
U.S		485	96	1856	2279	519	86	1622	2234	518	86	1622	4460	4506	4459
New England		909	200	2383	3231	885	167	2238	3174	883	167	2237		6521	6462
Middle Atlantic		692	126	2194	2884	701	105	2003	2891	700	105	2002	5725	5693	5698
U.S. Gas-Weighted		512	100	1957	2401	555	90	1714	2351	555	90	1714	4684	4761	4710
Cooling Degree-Days (U.S.)	45	380	759	69	28	346	781	76	33	347	782	76	1253	1231	1237

^aMacroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

^bOECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

^CPopulation-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold; forecasts are in italics.

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*. Projections of OECD growth are based on WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table 2. U.S. Energy Indicators: Mid World Oil Price Case

Table 2. U.S. Ellergy II		2000				2001				2002				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic ^a															
Real Fixed Investment															
(billion chained 1996 dollars-SAAR)	1731	1779	1792	1785	1803	1814	1820	1832	1849	1872	1903	1933	1772	1817	1889
Real Exchange Rate								4 070			4 000	4 00 0	4 400		
(index)	1.163	1.210	1.247	1.110	1.100	1.087	1.080	1.070	1.053	1.040	1.033	1.020	1.183	1.084	1.037
Business Inventory Change (billion chained 1996 dollars-SAAR)	10.3	17.6	21.0	14.9	1.4	-0.4	-0.7	-1.2	-0.6	1.1	4.1	5.5	16.0	-0.2	2.5
Producer Price Index	10.3	17.0	21.0	14.9	1.4	-0.4	-0.7	-1.2	-0.0	1.1	4.1	5.5	10.0	-0.2	2.5
(index, 1982=1.000)	1.301	1.321	1.334	1.349	1.359	1.343	1.338	1.338	1.339	1.336	1.335	1.338	1.326	1.345	1.337
Consumer Price Index				7.070	7.000	7.070	7.000	7.000	7.000	7.000	7.000	7.000	7.020	7.070	7.007
(index, 1982-1984=1.000)	1.702	1.717	1.730	1.743	1.754	1.761	1.769	1.778	1.786	1.793	1.800	1.808	1.723	1.765	1.797
Petroleum Product Price Index															
(index, 1982=1.000)	0.830	0.899	0.954	0.974	0.896	0.856	0.850	0.876	0.884	0.850	0.837	0.866	0.914	0.870	0.859
Non-Farm Employment															
(millions)	130.6	131.6	131.6	131.8	132.2	132.2	132.1	132.2	132.6	133.2	133.7	134.3	131.4	132.2	133.5
Commercial Employment						00.4			0.4.0		050		0.4.0		0.4.0
(millions) Total Industrial Production	91.2	91.7	92.1	92.5	93.0	93.1	93.2	93.5	94.0	94.6	95.2	95.7	91.9	93.2	94.9
(index, 1996=1.000)	1.187	1.210	1.221	1.239	1.233	1.232	1.234	1.237	1.244	1.255	1.269	1.282	1.214	1.234	1.263
Housing Stock	1.107	1.210	1.221	1.239	1.233	1.232	1.234	1.237	1.244	1.233	1.209	1.202	1.214	1.234	1.203
(millions)	115.7	115.8	116.2	116.8	117.1	117.4	117.7	118.0	118.3	118.6	118.9	119.2	116.1	117.6	118.7
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1996=1.000)	1.096	1.096	1.091	1.108	1.101	1.109	1.118	1.130	1.143	1.156	1.171	1.185	1.098	1.115	1.164
Vehicle Miles Traveled ^b															
(million miles/day)	6831	7680	7689	7175	6862	7674	7860	7402	7043	7781	7970	7526	7344	7452	7582
Vehicle Fuel Efficiency								4 000			4 00=	4 000	4 000		
(index, 1999=1.000)	1.001	1.025	0.997	0.987	0.981	1.022	1.008	1.002	1.005	1.010	1.007	1.003	1.002	1.003	1.006
(cents per mile)	4.16	4.23	4.24	4.34	4.24	4.02	4.01	4.02	4.01	3.91	3.83	3.90	4.24	4.07	3.92
Air Travel Capacity	4.10	4.23	4.24	4.34	4.24	4.02	4.01	4.02	4.01	3.91	3.03	3.90	4.24	4.07	3.92
(mill. available ton-miles/day)	455.0	474.7	485.4	<i>4</i> 81.8	478.2	496.5	510.3	500.0	493.1	5142	532 6	523.5	474.3	496.3	516.0
Aircraft Utilization	10010			101.0	770.2	700.0	0.0.0	000.0	700.7	011.2	002.0	020.0	77 7.0	100.0	0.10.0
(mill. revenue ton-miles/day)	256.3	287.1	291.4	281.5	267.3	285.4	300.7	285.5	283.3	302.8	317.3	303.6	279.1	284.8	301.8
Airline Ticket Price Index															
(index, 1982-1984=1.000)	2.309	2.419	2.474	2.375	2.419	2.430	2.433	2.454	2.495	2.508	2.514	2.534	2.394	2.434	2.513
Raw Steel Production															
(millions tons)	29.02	29.53	27.45	25.01	25.54	26.94	27.02	27.60	28.18	28.45	28.57	28.58	111.02	107.10	113.79

^aMacroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

blincludes all highway travel.

Seasonally-adjusted a

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold; forecasts are in italics.

Table 3. International Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except OECD Commercial Stocks)

(Million Barreis per Day, Excep	2000			SIUCKS	<i>2</i> 001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Demand ^a	l .								I						<u> </u>
OECD															
U.S. (50 States)	19.1	19.3	19.8	19.7	19.8	19.4	19.8	20.0	19.6	19.8	20.2	20.2	19.5	19.7	20.0
U.S. Territories	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
Canada	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.2	2.1	2.0	2.0	2.1
Europe	14.6	14.0	14.4	15.2	15.0	14.0	14.6	15.2	15.1	14.2	14.7	15.4	14.5	14.7	14.9
Japan	6.0	5.0	5.4	5.8	6.2	5.1	5.3	5.8	6.3	5.1	5.3	5.8	5.5	5.6	5.6
Australia and New Zealand	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.0	1.0	1.1
Total OECD	43.0	41.5	42.9	44.2	44.4	41.8	43.1	44.5	44.5	42.5	43.8	45.0	42.9	43.4	44.0
Non-OECD															
Former Soviet Union	3.9	3.7	3.7	3.7	3.8	3.7	3.7	3.7	3.9	3.7	3.7	3.7	3.7	3.7	3.8
Europe	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6
China	4.6	4.6	4.6	4.6	4.8	4.8	4.7	4.8	5.0	5.0	4.9	5.0	4.6	4.8	5.0
Other Asia	9.0	9.1	8.8	9.2	9.4	9.4	9.1	9.5	9.7	9.7	9.4	9.8	9.0	9.3	9.7
Other Non-OECD	13.7	13.9	14.0	14.0	14.0	14.3	14.4	14.3	14.3	14.6	14.7	14.6	13.9	14.2	14.6
Total Non-OECD	32.7	32.9	32.7	33.0	33.6	33.7	33.4	33.9	34.6	34.6	34.3	34.8	32.8	33.7	34.6
Total World Demand	75.7	74.3	75.6	77.2	78.0	75.5	76.6	78.3	79.0	77.1	78.2	79.8	75.7	77.1	78.6
Supply ^b															
OECD															
U.S. (50 States)	9.1	9.1	9.1	9.0	8.9	9.0	8.9	9.0	9.0	9.1	9.0	9.1	9.1	9.0	9.0
Canada	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	2.8	2.8	3.0	3.0	2.7	2.8	2.9
North Sea ^c	6.6	6.2	6.2	6.4	6.4	6.2	6.3	6.7	6.4	6.1	6.2	6.7	6.3	6.4	6.4
Other OECD	1.7	1.7	1.6	1.6	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Total OECD	20.2	19.6	19.6	19.8	19.8	19.7	19.8	20.4	19.9	19.7	19.9	20.5	19.8	19.9	20.0
Non-OECD															
OPEC	29.3	30.8	31.6	31.7	30.9	30.4	30.8	31.4	31.6	31.6	31.7	31.7	30.9	30.9	31.7
Former Soviet Union	7.6	7.7	7.9	8.2	8.1	8.2	8.3	8.3	8.4	8.5	8.6	8.7	7.9	8.2	8.6
China	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.1
Mexico	3.5	3.5	3.5	3.4	3.8	3.8	3.8	3.7	4.0	4.0	4.0	3.9	3.5	3.8	4.0
Other Non-OECD	11.2	11.2	11.4	11.5	11.2	11.2	11.4	11.5	11.3	11.4	11.6	11.7	11.3	11.4	11.5
Total Non-OECD	54.9	56.5	57.7	58.1	57.1	56.8	57.6	58.2	58.4	58.6	59.1	59.2	56.8	57.4	58.8
Total World Supply	75.0	76.1	77.3	77.9	76.9	76.5	77.4	78.6	78.3	78.4	79.1	79.6	76.6	77.4	78.8
Stock Changes															
Net Stock Withdrawals or Additions (-)														
U.S. (50 States including SPR)	0.2	-0.6	0.0	0.6	0.0	-0.6	-0.4	0.2	0.2	-0.6	-0.2	0.4	0.1	-0.2	0.0
Other	0.5	-1.2	-1.8	-1.3	1.1	-0.3	-0.4	-0.5	0.6	-0.7	-0.7	-0.3	-1.0	-0.1	-0.2
Total Stock Withdrawals	0.7	-1.8	-1.8	-0.7	1.1	-1.0	-0.8	-0.3	0.8	-1.3	-0.9	0.1	-0.9	-0.3	-0.3
OECD Comm. Stocks, End (bill. bbls.)		2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.6	2.7	2.8
Non-OPEC Supply	45.7	45.4	45.7	46.2	46.0	46.2	46.7	47.3	46.6	46.8	47.3	47.9	45.7	46.5	47.2
Net Exports from Former Soviet Union		4.0	4.2	4.5	4.2	4.5	4.6	4.6	4.5	4.8	4.9	4.9	4.1	4.5	4.8

^aDemand for petroleum by the OECD countries is synonymous with "petroleum product supplied," which is defined in the glossary of the EIA *Petroleum Supply Monthly,* DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

^bIncludes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

^cIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.	International Petro	oleum Statistics Report,

Table 4. U. S. Energy Prices

(Nominal Dollars)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Crude Oil Prices															
Imported Average ^a															
WTI ^b Spot Average	28.82	28.78	31.61	31.96	28.82	27.67	29.04	30.01	29.34	29.00	29.50	29.83	30.29	28.88	29.42
Natural Gas Wellhead															
(dollars per thousand cubic feet)	2.26	3.06	3.87	5.22	6.27	4.50	4.55	5.40	5.32	4.42	4.32	5.18	3.62	5.18	4.82
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)															
All Grades	1 44	1 57	1.56	1.54	1.47	1.52	1.53	1.47	1.46	1.49	1.49	1.46	1.53	1.50	1.47
Regular Unleaded			1.52	1.50	1.43	1.49	1.50	1.43	1.42	1.46	1.45	1.42	1.49	1.46	1.44
rtegulai Officadeu	1.40	1.55	1.52	1.50	1.40	1.43	1.00	1.40	1.72	1.40	1.40	1.72	1.43	1.40	1.77
No. 2 Diesel Oil, Retail															
(dollars per gallon)	1.42	1.41	1.50	1.58	1.47	1.41	1.42	1.46	1.43	1.42	1.42	1.45	1.48	1.44	1.43
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.85	0.78	0.91	0.97	0.84	0.74	0.77	0.86	0.83	0.76	0.77	0.85	0.88	0.81	0.81
No. 2 Llosting Oil Datail															
No. 2 Heating Oil, Retail	4 24	4 47	4 00	1 10	1 21	1.18	4 40	4.07	4.00	1.17	4 40	4.00	4 24	4.00	101
(dollars per gallon)	1.31	1.17	1.23	1.40	1.34	1.10	1.12	1.27	1.20	1.17	1.12	1.20	1.31	1.28	1.24
No. 6 Residual Fuel Oil, Retail d															
(dollars per barrel)	23.64	24.55	25.10	27.40	24.52	23.35	23.79	25.53	25.02	23.38	23.61	24.62	25.34	24.30	24.14
,															
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.21	1.21	1.18	120	121	1 22	1.20	120	1.20	1.21	1 19	1.18	1.20	1.21	1.20
(deliare per million Bita)				7.20			1.20	7.20	7.20		11.10	1.10	7.20		1.20
Heavy Fuel Oil ^e															
(dollars per million Btu)	3.74	4.18	4.34	4.46	3.82	3.83	3.97	4.07	3.88	3.84	3.94	3.95	4.25	3.90	3.90
Natural Gas															
(dollars per million Btu)	2.85	3.78	4.46	5.91	6.91	5.15	5.16	6.02	6.02	5.03	4.92	5.79	4.25	5.61	5.27
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	6 53	7 77	10 09	8 68	9 91	10.58	11 04	9 12	9 47	10 12	11 02	9 35	7.60	9.88	9.65
(donard per trioudant cubic feet)	0.00		10.03	0.00	J.J 1	10.00	11.04	J. 12	J. T 1	10.12	11.02	0.00	1.03	5.00	5.00
Electricity															
(cents per kilowatthour)	7.78	8.37	8.59	8.21	7.97	8.56	8.81	8.35	7.98	8.54	8.81	8.33	8.25	8.44	8.43
a															

^aRefiner acquisition cost (RAC) of imported crude oil.

^bWest Texas Intermediate.

^cAverage self-service cash prices.

d Average for all sulfur contents.

 $^{^{\}rm e}$ Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the fourth quarter of 2000. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Marketing Monthly, DOE/EIA-0380; Natural Gas Monthly, DOE/EIA-0130; Monthly Energy Review, DOE/EIA-0035; Electric Power Monthly, DOE/EIA-0226.

Table 5. U.S. Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

(Willion Barrels per Day, Except C	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply		L	1	L	<u> </u>	I		*				1	<u> </u>		
Crude Oil Supply															
Domestic Production a	5.86	5.84	5.79	5.84	5.84	5.84	5.75	5.85	5.82	5.84	5.83	5.80	5.83	5.82	5.82
Alaska		0.97	0.91	0.98	0.99	1.00	0.97	1.08	1.03	1.03	1.02	1.02	0.97	1.01	1.03
Lower 48		4.87	4.88	4.85	4.85	4.83	4.78	4.77	4.79	4.82	4.80	4.78	4.86	4.81	4.80
Net Imports (including SPR) b		9.22	9.51	8.81	8.96	9.46	9.73	9.16	9.10	9.73	9.75	9.21	8.92	9.33	9.45
Not importe (moldaring of Tt)	0.10	J.22	3.01	0.07	0.00	0.70	0.70	0.10	0.70	0.70	0.70	0.2 1	0.02	0.00	0.70
Other SPR Supply	0.02	0.17	0.07	0.07	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.08	0.09	0.00
SPR Stock Withdrawn or Added (-)		0.01	-0.02	0.32	-0.02	0.00	-0.17	-0.17	0.00	0.00	0.00	0.00	0.07	-0.09	0.00
Other Stock Withdrawn or Added (-)		0.04	0.13	-0.09	-0.17	-0.01	0.17	0.02	-0.21	-0.03	0.15	0.01	-0.01	0.00	-0.02
Product Supplied and Losses		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil		0.32	0.20	0.23	0.21	0.22	0.22	0.21	0.21	0.22	0.22	0.21	0.26	0.22	0.22
Chappening in Grade Chiminin	0.20	0.02	0.20	0.20	0.2 /	O.LL	O.LL	0.2 /	0.2	O.LL	0.22	0.2 /	0.20	O.LL	0.22
Total Crude Oil Supply	14.16	15.41	15.63	15.10	14.83	15.50	15.70	15.07	14.92	15.76	15.95	15.24	15.08	15.28	15.47
Other Supply															
NGL Production	1.97	1.94	1.93	1.79	1.60	1.84	1.86	1.92	1.94	1.94	1.92	2.00	1.91	1.81	1.95
Other Inputs	0.37	0.40	0.39	0.38	0.36	0.37	0.37	0.40	0.37	0.38	0.37	0.40	0.38	0.38	0.38
Crude Oil Product Supplied	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	0.94	0.94	0.95	0.97	0.94	0.98	0.96	0.91	0.90	0.94	0.94	0.91	0.95	0.95	0.92
Net Product Imports ^c	1.36	1.22	1.10	1.15	1.85	1.32	1.29	1.26	1.22	1.28	1.35	1.28	1.21	1.43	1.28
Product Stock Withdrawn or Added	0.33	-0.62	-0.14	0.41	0.18	-0.63	-0.39	0.35	0.40	-0.53	-0.34	0.37	-0.01	-0.12	-0.03
(-)															
Total Supply	19.12	19.30	19.85	19.81	19.76	19.39	19.79	19.91	19.75	19.77	20.19	20.18	19.52	19.71	19.97
Demand															
Motor Gasoline	8.03	8.49	8.58	8.41	8.23	8.51	8.68	8.55	8.24	8.73	8.81	8.68	8.38	8.49	8.62
Jet Fuel	1.64	1.67	1.78	1.74	1.75	1.70	1.74	1.76	1.76	1.73	1.80	1.81	1.71	1.74	1.77
Distillate Fuel Oil	3.76	3.56	3.61	3.81	4.13	3.64	3.56	3.82	4.05	3.72	3.67	3.92	3.69	3.79	3.84
Residual Fuel Oil	0.73	0.75	0.90	0.99	1.01	0.82	0.82	0.78	0.81	0.74	0.83	0.64	0.85	0.85	0.76
Other Oils d	4.96	4.82	4.97	4.75	4.65	4.72	4.98	5.01	4.90	4.84	5.09	5.13	4.87	4.84	4.99
Total Demand	19.12	19.29	19.85	19.70	19.76	19.39	19.79	19.91	19.75	19.77	20.19	20.18	19.49	19.71	19.97
Total Petroleum Net Imports	9.51	10.44	10.61	9.96	10.80	10.78	11.02	10.42	10.32	11.01	11.10	10.49	10.13	10.76	10.73
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)		292	280	289	304	305	289	287	306	309	295	294	289	287	294
Total Motor Gasoline	204	209	197	197	195	201	198	204	210	209	203	208	197	204	208
Finished Motor Gasoline		165	154	154	145	154	155	161	161	166	160	165	154	161	165
Blending Components	47	45	43	43	50	46	43	43	48	44	43	43	43	43	43
Jet Fuel		44	42	45	41	42	44	46	43	43	45	46	45	46	46
Distillate Fuel Oil	96	106	115	118	106	117	137	139	107	118	136	138	118	139	138
Residual Fuel Oil		37	38	36	40	40	42	42	39	40	41	42	36	42	42
Other Oils ^e	235	272	288	248	245	284	299	257	253	290	306	265	248	257	265
Total Stocks (excluding SPR)	908	960	961	932	930	989	1009	975	958	1009	1027	992	932	975	992
Crude Oil in SPR	569	569	570	541	542	542	558	574	574	574	574	574	541	574	574
Heating Oil Reserve		0	0	2	2	2	2	2	2	2	2	2	2	2	2
Total Stocks (including SPR)	1477	1529	1531	1473	1473	1531	1567	1549	1531	1583	1600	1566	1473	1549	1566

^aIncludes lease condensate.

^bNet imports equals gross imports plus SPR imports minus exports.

^CIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

^dIncludes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

Includes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's *Petroleum Supply Monthly*, Table C1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109, and Weekly Petroleum Status Report, DOE/EIA-0208.

Table 6. Approximate Energy Demand Sensitivities for the STIFS Model

(Percent Deviation Base Case)

		+ 10)% Prices	+ 10	% Weather ^e
Demand Sector	+1% GDP	Crude Oil ^c	N.Gas Wellhead ^d	Fall/Winter ^f	Spring/Summer ^f
Petroleum					
Total	0.6%	-0.3%	0.1%	1.1%	0.1%
Motor Gasoline	0.1%	-0.3%	0.0%	0.0%	0.0%
Distillate Fuel	0.8%	-0.2%	0.0%	2.7%	0.1%
Residual Fuel	1.6%	-3.4%	2.6%	2.0%	2.7%
Natural Gas					
Total	1.1%	0.3%	-0.4%	4.4%	1.0%
Residential	0.1%	0.0%	0.0%	8.2%	0.0%
Commercial	0.9%	0.0%	0.0%	7.3%	0.0%
Industrial	1.7%	0.2%	-0.5%	1.3%	0.0%
Electric Utility	1.8%	1.6%	-1.5%	1.0%	4.0%
Coal					
Total	0.7%	0.0%	0.0%	1.7%	1.7%
Electric Utility	0.6%	0.0%	0.0%	1.9%	1.9%
Electricity					
Total	0.6%	0.0%	0.0%	1.5%	1.7%
Residential	0.1%	0.0%	0.0%	3.2%	3.6%
Commercial	0.9%	0.0%	0.0%	1.0%	1.4%
Industrial	0.8%	0.0%	0.0%	0.3%	0.2%

^aPercent change in demand quantity resulting from specified percent changes in model inputs.

Table 7. Forecast Components for U.S. Crude Oil Production

(Million Barrels per Day)

				Difference	
	High Price Case	Low Price Case	Total	Uncertainty	Price Impact
United States	6.09	5.45	0.64	0.08	0.56
Lower 48 States	5.02	4.42	0.60	0.07	0.53
Alaska	1.07	1.03	0.04	0.02	0.02

Note: Components provided are for the fourth quarter 2002. Totals may not add to sum of components due to independent rounding. Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

^dAverage unit value of marketed natural gas production reported by States.

^eRefers to percent changes in degree-days.

Response during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period (second and third calendar quarters) refers to change in cooling degree-days.

Table 8. U.S. Natural Gas Supply and Demand: Mid world Oil Price Case

(Trillion Cubic Feet)

(Tillion Cubic Feet)	2000					2004				2002			1	Vaar	
					_	2001				2002				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Total Dry Gas Production	4.77	4.77	4.84	4.94	4.89	4.88	4.95	5.12	5.07	5.04	5.05	5.17	19.32	19.85	20.34
Net Imports	0.87	0.82	0.88	0.98	0.98	0.97	1.04	1.04	1.03	1.02	1.07	1.06	3.56	4.02	4.18
Supplemental Gaseous Fuels	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.10	0.12	0.12
Total New Supply	5.67	5.62	5.75	5.94	5.91	5.87	6.01	6.19	6.14	6.09	6.15	6.27	22.98	23.99	24.64
Working Gas in Storage															
Opening	2.51	1.15	1.71	2.47	1.72	0.72	1.61	2.60	2.24	1.04	1.81	2.71	2.51	1.72	2.24
Closing	1.15	1.71	2.47	1.72	0.72	1.61	2.60	2.24	1.04	1.81	2.71	2.35	1.72	2.24	2.35
Net Withdrawals	1.36	-0.56	-0.77	0.75	1.00	-0.89	-0.99	0.36	1.20	-0.78	-0.90	0.37	0.79	-0.52	-0.11
Total Supply	7.03	5.06	4.98	6.70	6.91	4.98	5.02	6.55	7.34	5.31	5.25	6.63	23.77	23.47	24.53
Balancing Item ^a	-0.08	-0.06	-0.25	-0.62	0.42	0.09	-0.18	-0.64	0.06	-0.02	-0.06	-0.56	-1.02	-0.30	-0.58
Total Primary Supply	6.95	5.00	4.72	6.08	7.32	5.08	4.85	5.92	7.41	5.29	5.19	6.08	22.75	23.17	23.96
Demand															
Lease and Plant Fuel	0.31	0.31	0.32	0.32	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34	1.26	1.28	1.32
Pipeline Use	0.24	0.17	0.16	0.21	0.24	0.17	0.16	0.20	0.24	0.17	0.17	0.20	0.77	0.78	0.78
Residential	2.20	0.77	0.39	1.57	2.52	0.85	0.36	1.43	2.45	0.85	0.36	1.46	4.93	5.17	5.13
Commercial	1.29	0.62	0.48	0.96	1.44	0.65	0.45	0.93	1.44	0.66	0.46	0.95	3.35	3.47	3.50
Industrial (Incl. Nonutility Use)	2.35	2.30	2.31	2.44	2.34	2.31	2.49	2.45	2.50	2.47	2.68	2.61	9.41	9.59	10.26
Electric Utilities	0.56	0.83	1.06	0.58	0.46	0.78	1.07	0.57	0.45	0.82	1.19	0.51	3.04	2.89	2.97
Total Demand	6.95	5.00	4.72	6.08	7.32	5.08	4.85	5.92	7.41	5.29	5.19	6.08	22.75	23.17	23.96

^aThe balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Natural Gas Division.

Table 9. U.S. Coal Supply and Demand: Mid World Oil Price Case

(Million Short Tons)

(Willien Chert Tone)	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															,
Production	274.0	262.2	270.6	267.4	280.9	277.2	279.9	281.2	288.3	279.1	283.9	277.3	1074.3	1119.1	1128.6
Appalachia	109.5	107.0	101.5	102.2	107.0	109.9	104.2	101.8	111.3	108.5	103.3	98.0	420.2	422.9	421.1
Interior	36.1	35.2	37.6	35.7	36.6	35.8	36.8	36.3	34.3	34.4	35.5	34.0	144.6	145.4	138.3
Western	128.5	120.0	131.5	129.5	137.3	131.4	138.9	143.1	142.7	136.2	145.0	145.3	509.5	550.8	569.2
Primary Stock Levels ^a															
Opening	39.5	44.4	40.4	37.1	34.2	41.3	40.2	36.5	34.9	40.8	41.0	36.2	39.5	34.2	34.9
Closing	44.4	40.4	37.1	34.2	41.3	40.2	36.5	34.9	40.8	41.0	36.2	35.2	34.2	34.9	35.2
Net Withdrawals	-4.9	4.0	3.3	2.9	-7.1	1.1	3.7	1.6	-6.0	-0.2	4.8	1.0	5.3	-0.7	-0.3
Imports	2.8	2.7	3.6	3.4	3.4	3.2	3.2	3.2	3.2	3.2	3.2	3.3	12.5	13.0	13.0
Exports	13.6	14.4	15.8	14.7	15.2	15.0	15.2	15.1	15.2	15.3	15.6	15.5	58.5	60.5	61.6
Total Net Domestic Supply	258.3	254.5	261.7	259.0	262.1	266.5	271.6	270.9	270.4	266.8	276.4	266.1	1033.6	1071.0	1079.7
Secondary Stock Levels b															
Opening	143.5	139.9	136.5	119.3	108.4	103.5	117.9	102.3	105.2	104.8	116.3	100.2	143.5	108.4	105.2
Closing					103.5	117.9			104.8		100.2		108.4	105.2	104.3
Net Withdrawals	3.6	3.4	17.2	10.9	4.9	-14.3	15.6	-3.0	0.5	-11.5	16.1	-4.2	35.1	3.2	0.9
Waste Coal Supplied to IPPs c	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.8	10.1	10.6	11.1
Total Supply	264.4	260.4	281.4	272.5	269.6	254.8	289.8	270.5	273.6	258.1	295.3	264.7	1078.8	1084.8	1091.7
Demand															
Coke Plants	7.3	7.4	7.5	6.2	6.6	6.8	7.0	6.7	7.1	7.0	7.3	6.8	28.4	27.1	28.3
Electricity Production															
Electric Utilities	214.1	202.1	227.3	214.2	211.0	198.2	228.2	208.4	212.9	200.7	232.8	201.9	857.6	845.8	848.3
Nonutilities (Excl. Cogen.) d	25.6	27.6	35.1	35.0	34.6	32.9	37.6	35.7	35.2	33.5	38.4	36.4	123.3	140.9	143.5
Retail and General Industry		16.3	16.3	19.4	18.4	16.9	17.0	19.7	18. 4	16.8	16.9	19.6	70.1	72.0	71.6
Total Demand ^e	265.2	253.4	286.1	274.8	270.6	254.8	289.8	270.5	273.6	258.1	295.3	264.7	1079.4	1085.8	1091.7
Discrepancy f	-0.7	7.1	-4.7	-2.3	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-1.0	0.0

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121, and *Electric Power Monthly*, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^cEstimated independent power producers' (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999 and 2000, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^eTotal Demand includes estimated IPP consumption.

The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

Table 10. U.S. Electricity Supply and Demand: Mid World Oil Price Case

(Billion Kilowatt-hours)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply					•										
Net Utility Generation															
Coal	425.7	401.2	445.9	419.5	428.6	409.0	467.4	415.2	426.1	422.2	489.9	390.3	1692.3	1720.2	1728.5
Petroleum	11.0	16.4	23.3	21.9	33.2	22.0	26.3	18.0	19.3	18.7	26.9	11.2	72.6	99.5	76.0
Natural Gas	54.4	79.1	100.5	55.8	43.5	74.0	101.8	54.6	42.3	77.4	113.0	48.8	289.8	273.9	281.5
Nuclear	185.0	177.4	182.0	161.1	170.6	164.3	175.0	160.5	167.2	156.0	177.9	163.2	705.4	670.4	664.3
Hydroelectric	66.9	73.0	57.4	50.2	60.3	70.1	58.6	59.3	69.7	74.4	62.5	61.6	247.5	248.3	268.1
Geothermal and Other a	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.6	2.2	2.2	2.2
Subtotal	743.4	747.6	809.6	709.1	736.7	739.9	829.7	708.2	725.1	749.3	870.7	675.6	3009.8	3014.5	3020.8
Nonutility Generation ^b															
Coal	55.2	58.5	82.1	71.6	75.9	76.0	88.9	75.7	86.5	87.4	87.4	101.1	267.3	316.5	362.4
Petroleum	11.1	8.8	11.7	11.0	9.7	9.7	11.3	9.6	10.0	10.1	10.1	11.7	42.6	40.4	41.8
Natural Gas	66.9	76.0	98.0	80.0	73.0	83.5	114.4	90.1	84.1	83.5	95.2	128.9	320.9	361.1	391.7
Other Gaseous Fuels c	2.5	2.8	3.6	2.4	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	11.2	8.5	8.9
Nuclear	5.2	5.0	16.7	20.2	21.6	21.9	22.1	22.1	21.6	21.9	22.1	22.1	47.1	87.8	87.8
Hydroelectric	3.9	5.0	4.2	4.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	17.3	18.0	18.0
Geothermal and Other d	21.8	22.2	23.4	23.8	22.1	22.0	22.3	22.7	22.1	22.0	22.3	22.7	91.2	89.1	89.1
Subtotal	166.6	178.3	239.7	213.2	208.9	219.7	265.7	227.0	231.1	231.5	243.8	293.2	797.7	921.3	999.5
Total Generation	910.0	925.9	1049.2	922.3	945.6	959.7	1095.4	935.2	956.2	980.8	1114.5	968.8	3807.4	3935.8	4020.3
Net Imports ^e	9.2	8.7	13.1	4.6	7.7	8.8	12.0	7.6	7.3	8.3	11.7	8.6	35.6	36.2	35.9
Total Supply	919.2	934.6	1062.3	926.9	953.3	968.5	1107.4	942.8	963.5	989.2	1126.2	977.4	3843.0	3972.0	4056.3
Losses and Unaccounted for f	60.3	73.3	41.1	43.9	54.3	81.9	65.2	63.5	54.6	83.8	66.9	64.9	218.6	264.9	270.2
Demand															
Retail Sales ⁹															
Residential	292.5	264.2	352.8	279.4	312.4	275.1	361.7	274.2	312.7	280.8	370.1	279.6	1188.9	1223.5	1243.2
Commercial	236.2	254.3	294.4	250.7	246.7	257.6	300.5	249.3	248.9	264.5	311.0	255.8	1035.6	1054.0	1080.1
Industrial	260.0	268.5	280.5	269.7	259.2	270.3	281.6	271.0	263.1	275.3	287.1	276.7	1078.7	1082.1	1102.2
Other	26.4	27.4	30.6	27.1	26.7	26.9	30.0	27.1	26.9	27.2	30.6	27.6	111.5	110.7	112.3
Subtotal	815.1	814.3	958.2	826.9	845.0	829.9	973.8	821.6	851.5	847.8	998.8	839.7	3414.6	3470.2	3537.8
Nonutility Use/Sales h	43.8	46.9	63.1	56.1	54.1	56.7	68.4	57.7	57.4	57.5	60.5	72.8	209.9	236.9	248.2
Total Demand	858.9	861.2	1021.3	883.0	899.1	886.6	1042.2	879.3	908.9	905.3	1059.3	912.5	3624.4	3707.1	3786.0
Memo:															
Nonutility Sales to															
Electric Utilities b	122.8	131.4	176.6	157.1	154.8	163.0	197.3	169.2	173.7	174.0	183.2	220.4	587.8	684.4	751.3

 $^{^{\}rm a}\mbox{{\sc "Other"}}$ includes generation from wind, wood, waste, and solar sources.

^bElectricity(net Generation) from nonutility sources, including cogenerators and small power producers.

^cIncludes refinery still gas and other process or waste gases and liquefied petroleum gases.

^dIncludes geothermal, solar, wind, wood, waste, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

eData for 2000 are estimates.

[†]Balancing item, mainly transmission and distribution losses.

⁹Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA'S *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales are reported annually in Appendix C of EIA's Electric Sales and Revenue. Quarterly data for power marketers (and thus retail sales totals) are imputed. Data for 2000 are estimated.

^hDefined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA 860B, "Annual Electric Generator Report - Nonutility (1998 and 1999) and EIA-867, "Annual Nonutility Power Producer Report," (prior to 1998). Data for 2000 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

Table 11. U.S. Renewable Energy Use by Sector: Mid World Oil Price Case

(Quadrillion Btu)

		Year			Annual	Percentage	Change
	1999	2000	2001	2002	1999-2000	2000-2001	2001-2002
Electric Utilities							
Hydroelectric Power ^a	3.079	2.593	2.601	2.809	-15.8	0.3	8.0
Geothermal, Solar and Wind Energy b	0.036	0.003	0.004	0.004	-91.7	33.3	0.0
Biofuels ^c	0.021	0.020	0.021	0.021	-4.8	5.0	0.0
Total	3.136	2.617	2.625	2.834	-16.5	0.3	8.0
Nonutility Power Generators							
Hydroelectric Power a	0.149	0.179	0.186	0.186	20.1	3.9	0.0
Geothermal, Solar and Wind Energy b	0.373	0.341	0.333	0.333	-8.6	-2.3	0.0
Biofuels ^c	0.523	0.745	0.729	0.729	42.4	-2.1	0.0
Total	1.045	1.265	1.249	1.249	21.1	-1.3	0.0
Total Power Generation	4.180	3.882	3.874	4.082	-7.1	-0.2	5.4
Other Sectors d							
Residential and Commercial ^e	0.553	0.576	0.547	0.577	4.2	-5.0	5.5
Industrial ^f	1.942	2.003	2.008	2.058	3.1	0.2	2.5
Transportation ^g	0.100	0.114	0.114	0.117	14.0	0.0	2.6
Total	2.595	2.693	2.669	2.751	3.8	-0.9	3.1
Net Imported Electricity h	0.219	0.255	0.259	0.258	16.4	1.6	-0.4
Total Renewable Energy Demand	6.994	6.829	6.802	7.091	-2.4	-0.4	4.2

^aConventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

bAlso includes photovoltaic and solar thermal energy. Sharp declines since 1998 in the electric utility sector and corresponding increases in the nonutility sector for this category mostly reflect sale of geothermal facilities to the nonutility sector.

^CBiofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

^dRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.

^eIncludes biofuels and solar energy consumed in the residential and commercial sectors.

^fConsists primarily of biofuels for use other than in electricity cogeneration.

^gEthanol blended into gasoline.

^hRepresents 69.3 percent of total electricity net imports, which is the proportion of total 1999 net imported electricity (0.300 quadrillion Btu) attributable to renewable sources (0.208 quadrillion Btu). See *EIA*'s *Monthly Energy Review*, Table 1.5

Table A1. Annual U.S. Energy Supply and Demand

_								Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real Gross Domestic Product (GDP)															
(billion chained 1996 dollars)	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	9320	9494	9818
Imported Crude Oil Price ^a															
(nominal dollars per barrel)	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	27.72	25.52	26.41
,															
Petroleum Supply															
Crude Oil Production ^b															
(million barrels per day)	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.83	5.82	5.82
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.13	10.76	10.73
Energy Demand															
inorgy Domana															
World Petroleum															
(million barrels per day)	64.8	65.9	65.7	66.6	66.8	67.0	68.3	69.9	71.4	73.0	73.6	74.9	75.7	77.1	78.7
U.S. Petroleum															
(million barrels per day)	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.49	19.71	19.97
Natural Gas															
(trillion cubic feet)	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	22.75	23.17	23.96
Coal															
(million short tons)	877	895	903	899	907	943	950	962	1006	1030	1038	1045	1079	1086	1092
Electricity (billion kilowatthours)															
Retail Sales ^c		2647	2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	3415	3470	3538
Nonutility Own Use d	NA	93	95	102	108	127	138	145	145	148	156	185	210	237	248
Total	NA	2740	2807	2864	2871	2988	3073	3159	3246	3294	3420	3497	3624	3707	3786
Total Energy Demand ^e															
(quadrillion Btu)	NA	84.2	84.2	84.5	85.6	87.4	89.2	90.9	93.9	94.2	95.2	97.1	98.4	99.0	100.6
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1996 Dollar)	NA	12.77	12.55	12.66	12.44	12.37	12.14	12.07	12.02	11.54	11.18	10.94	10.56	10.43	10.25

^aRefers to the imported cost of crude oil to U.S. refiners.

b Includes lease condensate.

^cTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.

^dDefined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 2000 are estimates.

^e "Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, *Annual Energy Review*, 1999, DOE/EIA-0384(97) (AER), Table 1.1. Prior to 1990, some components of renewable energy consumption, particularly relating to consumption at nonutility electric generating facilities, were not available. For those years, a less compehensive measure of total energy demand can be found in EIA's *AER*. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review (MER*). Consequently, the historical data may not precisely match those published in the *MER* or the *AER*.

Notes: SPR: Strategic Petroleum Reserve. Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; International Petroleum Statistics Report DOE/EIA-520, and Weekly Petroleum Status Report DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.
(Energy Information Administration/Short-Term Energy Outlook April 2001)

Table A2. Annual U.S. Macroeconomic and Weather Indicators

								Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Macroeconomic															
Real Gross Domestic Product															
(billion chained 1996 dollars)	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	9320	9494	9818
GDP Implicit Price Deflator	0300	0332	0700	0070	0000	7005	7340	7344	7013	0133	0310	0070	3320	5454	3010
(Index, 1996=1.000)	0.802	0.833	0.865	0.897	0.919	0.941	0.960	0.981	1.000	1.020	1.032	1.048	1.070	1.090	1.108
Real Disposable Personal Income	0.002	0.000	0.000	0.007	0.010	0.541	0.000	0.501	1.000	1.020	1.002	1.0-10	1.070	1.000	1.100
(billion chained 1996 Dollars)	4784	4907	5014	5033	5189	5261	5397	5539	5678	5854	6134	6331	6510	6674	6950
Manufacturing Production	7707	4301	3014	3033	3103	3201	3331	3333	3070	3034	0134	0001	0010	0074	0300
(Index, 1996=1.000)	0.801	0.816	0.812	0.793	0.825	0.855	0.907	0.955	1.000	1.070	1.123	1.178	1.243	1.256	1.291
Real Fixed Investment	0.001	0.010	0.012	0.7 33	0.023	0.000	0.507	0.555	1.000	1.070	1.125	1.170	1.240	1.200	1.201
(billion chained 1996 dollars)	887	911	895	833	886	958	1046	1109	1213	1329	1485	1621	1772	1817	1889
Real Exchange Rate	001	311	033	000	000	330	1040	1103	1213	1323	1403	1021	1112	1011	1000
(Index, 1996=1.000)	NA	NA	0.963	0.966	0.960	1.001	0.981	0.927	1.000	1.102	1.122	1.083	1.183	1.084	1.037
Business Inventory Change	IVA	147	0.505	0.500	0.500	1.001	0.501	0.521	1.000	1.102	1.122	1.000	1.100	1.004	1.007
(billion chained 1996 dollars)	17.0	14.2	8.9	-6.8	-4.7	3.6	12.1	14.1	10.1	15.2	25.6	0.1	16.0	-0.2	2.5
Producer Price Index	17.0	1-7-2	0.0	0.0	7.7	0.0		1-1.1		10.2	20.0	0	70.0	0.2	2.0
(index, 1982=1.000)	1.069	1.122	1.163	1.165	1.172	1.189	1.205	1.247	1.277	1.275	1.244	1.255	1.326	1.345	1.337
Consumer Price Index	11000						200						7.020	7.070	1.001
(index, 1982-1984=1.000)	1.184	1.240	1.308	1.363	1.404	1.446	1.483	1.525	1.570	1.606	1.631	1.666	1.723	1.765	1.797
Petroleum Product Price Index			11000									11000	7.720	7.700	
(index, 1982=1.000)	0.539	0.612	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.914	0.870	0.859
Non-Farm Employment	0.000	0.0.2	••	•.•.	•.•	0.020		0.000	••	0.000	0.0.0	0.000	0.0	0.070	0.000
(millions)	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.8	128.8	131.4	132.2	133.5
Commercial Employment															
(millions)	67.8	70.0	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.5	91.9	93.2	94.9
Total Industrial Production												-	•		
(index, 1996=1.000)	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.3
Housing Stock															
(millions)	101.6	102.9	103.5	104.5	105.5	106.8	108.2	109.6	111.0	112.5	114.1	115.7	116.1	117.6	118.7
Weather ^a															
Heating Degree-Days															
U.S	4653	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	4460	4506	4459
New England	6715	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	6499	6521	6462
Middle Atlantic	6088	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	5725	5693	5698
U.S. Gas-Weighted	4804	4856	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	4684	4761	4710
Cooling Degree-Days (U.S.)	1283.0	1156.0	1260.0	1331.0	1040.0	1218.0	1220.0	1293.0	1180.0	1156.0	1410.0	1297.0	1253.0	1230.7	1236.7

^aPopulation-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

Notes: Historical data are printed in bold; forecasts are in italics.

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

			,					Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Demand ^a	U		•	.1			L.		•	L.	1	1		L	1
OECD															
U.S. (50 States)	17.3	17.3	17.0	16.7	17.0	17.2	17.7	17.7	18.3	18.6	18.9	19.5	19.5	19.7	20.0
Europe ^b	12.4	12.5	12.6	13.4	13.6	13.5	13.6	14.1	14.3	14.4	14.7	14.5	14.5	14.7	14.9
Japan	4.8	5.0	5.1	5.3	5.4	5.4	5.7	5.7	5.9	5.7	5.5	5.6	5.5	5.6	5.6
Other OECD	2.6	2.7	2.7	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.3	3.3	3.4	3.5
Total OECD	37.1	37.6	37.5	38.1	38.8	39.0	39.9	40.6	41.4	41.8	42.3	42.9	42.9	43.4	44.0
Non-OECD															
Former Soviet Union	8.9	8.7	8.4	8.4	6.8	5.6	4.8	4.6	4.0	3.9	3.8	3.7	3.7	3.7	3.8
Europe	2.2	2.1	1.7	1.4	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.6	1.6
China	2.3	2.4	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.1	4.3	4.6	4.8	5.0
Other Asia	4.4	4.9	5.3	5.7	6.2	6.8	7.3	7.9	8.5	9.0	8.7	9.0	9.0	9.3	9.7
Other Non-OECD	10.0	10.3	10.5	10.6	11.0	11.4	11.8	12.1	12.4	12.9	13.3	13.6	13.9	14.2	14.6
Total Non-OECD	27.7	28.3	28.2	28.5	28.0	28.0	28.4	29.3	30.0	31.2	31.4	32.1	32.8	33.7	34.6
Total World Demand	64.8	65.9	65.7	66.6	66.8	67.0	68.3	69.9	71.4	73.0	73.6	74.9	75.7	77.1	78.6
Supply ^c															
OECD															
U.S. (50 States)	10.5	9.9	9.7	9.9	9.8	9.6	9.4	9.4	9.4	9.5	9.3	9.0	9.1	9.0	9.0
Canada	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.6	2.7	2.8	2.9
North Sea d	3.8	3.7	3.9	4.1	4.5	4.8	5.5	5.9	6.3	6.2	6.2	6.3	6.3	6.4	6.4
Other OECD	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.5	1.7	1.7	1.7
Total OECD	17.8	17.1	17.1	17.5	17.9	18.0	18.7	19.2	19.7	19.9	19.7	19.4	19.8	19.9	20.0
Non-OECD							. •							70.0	20.0
OPEC	21.5	23.3	24.5	24.6	25.8	26.6	27.0	27.6	28.3	29.9	30.4	29.3	30.9	30.9	31.7
Former Soviet Union	12.5	12.1	11.4	10.4	8.9	8.0	7.3	7.1	7.1	7.1	7.2	7.6	7.9	8.2	8.6
China	2.7	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.2	3.2	3.2	3.2	3.1
Mexico	2.9	2.9	3.0	3.2	3.2	3.2	3.2	3.1	3.3	3.4	3.5	3.4	3.5	3.8	4.0
Other Non-OECD	7.3	12.0	8.0	8.1	8.4	8.7	9.2	9.9	10.2	10.5	10.8	11.3	11.3	11.4	11.5
Total Non-OECD	47.0	48.9	49.7	49.1	49.1	49.4	49.6	50.7	52.0	54.2	55.2	54.8	56.8	57.4	58.8
Total World Supply	64.8	65.9	66.8	66.7	67.0	67.4	68.3	69.9	71.8	74.1	74.9	74.2	76.6	77.4	78.8
Total Stock Withdrawals	0.1	0.0	-1.1	-0.1	-0.3	-0.4	0.0	0.0	-0.4	-1.1	-1.3	0.8	-0.9	-0.3	-0.3
OECD Comm. Stocks, End (bill. bbls.)	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.6	2.6	2.7	2.8
Net Exports from Former Soviet Union	3.6	3.4	3.0	2.1	2.1	2.3	2.4	2.6	3.0	3.3	3.5	3.9	4.1	4.5	4.8

^aDemand for petroleum by the OECD countries is synonymous with "petroleum product supplied," which is defined in the glossary of the EIA *Petroleum Supply Monthly*, DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

^bOECD Europe includes the former East Germany.

C Includes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

^dIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: International Petroleum Statistics Report, DOE/EIA-0520, and Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table A4. Annual Average U.S. Energy Prices

(Nominal Dollars)

,								Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Crude Oil Prices															
Imported Average ^a	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	27.72	25.52	26.41
	15.98	19.78	24.48	21.60	20.54	18.49	17.16	17.14	20.61	20.61	14.45	17.22	30.29	25.52 28.88	20.41 29.42
WTI ^b Spot Average	15.98	19.78	24.48	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	28.88	29.42
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.69	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.95	2.17	3.62	5.18	4.82
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades	0.92	1.02	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.50	1.47
Regular Unleaded	0.91	0.99	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.46	1.44
No. 2 Diesel Oil, Retail															
(dollars per gallon)	0.91	0.99	1.16	1.12	1.10	1.11	1.11	1.10	1.22	1.19	1.04	1.12	1. 4 8	1.44	1.43
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.47	0.56	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.51	0.88	0.81	0.81
No. 2 Heating Oil, Retail															
(dollars per gallon)	0.81	0.90	1.06	1.02	0.93	0.91	0.88	0.87	0.99	0.99	0.85	0.88	1.31	1.28	1.24
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	14.04	16.20	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	24.30	24.14
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.47	1.44	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.21	1.20
Heavy Fuel Oil d															
(dollars per million Btu)	2.41	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.39	4.25	3.90	3.90
Natural Gas															
(dollars per million Btu)	2.26	2.36	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.25	5.61	5.27
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	5.47	5.64	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	7.69	9.88	9.65
Electricity															
(cents per kilowatthour)	7.49	7.64	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.25	8.44	8.43

^aRefiner acquisition cost (RAC) of imported crude oil.

^bWest Texas Intermediate.

^cAverage self-service cash prices.

^dAverage for all sulfur contents.

^eIncludes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Marketing Monthly, DOE/EIA-0380; Natural Gas Monthly, DOE/EIA-0130; Monthly Energy Review, DOE/EIA-0035; Electric Power Monthly, DOE/EIA-0226.

Table A5. Annual U.S. Petroleum Supply and Demand

(Million Barrels per Day, Except Closing Stocks)

								Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply	L.	J	L	•		•	l l	J	•	•		1		l l	
Crude Oil Supply															
Domestic Production a	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.83	5.82	5.82
Alaska	2.02	1.87	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	1.01	1.03
Lower 48	6.12	5.74	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.86	4.81	4.80
Lower 48 Net Imports (including SPR) b	4.95	5.70	5.79	5.67	5.99	6.69	6.96	7.14	7.40	8.12	8.60	8.61	8.92	9.33	9.45
Other SPR Supply	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.01	0.08	0.09	0.00
Stock Draw (Including SPR)	0.00	-0.09	0.02	-0.01	0.00	-0.08	-0.02	0.09	0.05	-0.06	-0.07	0.09	-0.02	0.00	-0.02
Product Supplied and Losses	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.20	0.20	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.26	0.22	0.22
Total Crude Oil Supply	13.25	13.40	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.08	15.28	15.47
Other Supply															
NGL Production	1.62	1.55	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.81	1.95
Other Inputs	0.11	0.11	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.38	0.38
Crude Oil Product Supplied	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	0.66	0.66	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.95	0.92
Net Product Imports ^c	1.63	1.50	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.21	1.43	1.28
Product Stock Withdrawn	0.03	0.13	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	-0.01	-0.12	-0.03
Total Supply	17.33	17.37	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.52	19.71	19.97
Demand															
Motor Gasoline ^d	7.36	7.40	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.38	8.49	8.62
Jet Fuel	1.45	1.49	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.71	1.74	1.77
Distillate Fuel Oil	3.12	3.16	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.69	3.79	3.84
Residual Fuel Oil	1.38	1.37	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.85	0.85	0.76
Other Oils ^e	4.03	3.95	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.84	4.99
Total Demand	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.49	19.71	19.97
Total Petroleum Net Imports	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.13	10.76	10.73
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	330	341	323	325	318	335	337	303	284	305	324	284	289	287	294
Total Motor Gasoline	228	213	220	219	216	226	215	202	195	210	216	193	197	204	208
Jet Fuel	44	41	52	49	43	40	47	40	40	44	45	41	45	46	46
Distillate Fuel Oil	124	106	132	144	141	141	145	130	127	138	156	125	118	139	138
Residual Fuel Oil	45	44	49	50	43	44	42	37	46	40	45	36	36	42	42
Other Oils **	267	257	261	267	263	273	275	258	250	259	291	246	248	257	265

a. Includes lease condensate.

CNet imports equals gross imports plus SPR imports minus exports.

CNet imports equals gross imports plus SPR imports minus exports.

CNet imports equals gross imports plus SPR imports minus exports.

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Includes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's Petroleum Supply Monthly, TableC1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109, and Weekly Petroleum Status Report, DOE/EIA-0208.

Table A6. Annual U.S. Natural Gas Supply and Demand

(Trillion Cubic Feet)

								Year							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply		•	•	•		•			•	•	•			•	
Total Dry Gas Production	17.10	17.31	17.81	17.70	17.84	18.10	18.82	18.60	18.85	18.90	18.71	18.62	19.32	19.85	20.34
Net Imports	1.22	1.27	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.56	4.02	4.18
Supplemental Gaseous Fuels	0.10	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.12	0.12
Total New Supply	18.42	18.69	19.38	19.45	19.88	20.42	21.39	21.40	21.75	21.84	21.80	22.14	22.98	23.99	24.64
Working Gas in Storage															
Opening	2.76	2.85	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.51	1.72	2.24
Closing	2.85	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.51	1.72	2.24	2.35
Net Withdrawals	-0.09	0.34	-0.56	0.24	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.22	0.79	-0.52	-0.11
Total Supply	18.33	19.03	18.82	19.70	20.11	20.70	21.11	21.85	21.73	21.84	21.25	22.36	23.77	23.47	24.53
Balancing Item ^a	-0.30	-0.23	-0.11	-0.66	-0.56	-0.42	-0.40	-0.27	0.24	0.11	0.01	-0.67	-1.02	-0.30	-0.58
Total Primary Supply	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	22.75	23.17	23.96
Demand															
Lease and Plant Fuel	1.10	1.07	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.16	1.08	1.26	1.28	1.32
Pipeline Use	0.61	0.63	0.66	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.74	0.77	0.78	0.78
Residential	4.63	4.78	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.93	5.17	5.13
Commercial	2.67	2.72	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.35	3.47	3.50
Industrial (Incl. Nonutilities)	6.38	6.82	7.02	7.23	7.53	7.98	8.17	8.58	8.87	8.83	8.69	9.00	9.41	9.59	10.26
Electric Utilities	2.64	2.79	2.79	2.79	2.77	2.68	2.99	3.20	2.73	2.97	3.26	3.11	3.04	2.89	2.97
Total Demand	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	22.75	23.17	23.96

The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Natural Gas Division.

Table A7. Annual U.S. Coal Supply and Demand

(Million Short Tons)

							Year								
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply								•							
Production	950.3	980.7	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1074.3	1119.1	1128.6
Appalachia	NA	464.8	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	420.2	422.9	421.1
Interior	NA	198.1	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	144.6	145.4	138.3
Western	NA	317.9	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	509.5	550.8	569.2
Primarv Stock Levels ^a															
Opening	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	34.2	34.9
Closing	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	34.2	34.9	35.2
Net Withdrawals	-2.1	1.4	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	5.3	-0.7	-0.3
Imports	2.1	2.9	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	12.5	13.0	13.0
Exports	95.0	100.8	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	60.5	61.6
Total Net Domestic Supply	855.3	884.2	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	1033.6	1071.0	1079.7
Secondary Stock Levels b															
Opening	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	143.5	108.4	105.2
Closing	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	143.5	108.4	105.2	104.3
Net Withdrawals	27.0	12.3	-22.1	0.5	4.0	43.2	-15.7	1.5	11.7	16.6	-23.0	-14.1	35.1	3.2	0.9
Waste Coal Supplied to IPPs °	0.0	0.0	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	11.1
waste Coal Subblied to IPPs	0.0	0.0	0.0	0.0	0.0	0.4	7.9	0.5	0.0	0.1	9.0	9.0	10.1	10.0	11.1
Total Supply	882.3	896.5	899.4	891.4	907.8	936.5	954.0	960.4	1006.7	1033.2	1031.6	1043.6	1078.8	1084.8	1091.7
Demand															
Coke Plants	41.9	40.5	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.4	27.1	28.3
Electricity Production							-		-		-		_		
Electric Utilities	758.4	766.9	773.5	772.3	779.9	813.5	817.3	829.0	874.7	900.4	910.9	894.1	857.6	845.8	848.3
Nonutilities (Excl. Cogen.) d	NA	5.7	7.4	11.4	15.0	17.5	19.9	21.2	22.2	21.6	26.9	52.7	123.3	140.9	143.5
Retail and General Industry	76.3	82.3	83.1	81.5	80.2	81.1	81.2	78.9	77.7	78.0	72.3	70.4	70.1	72.0	71.6
Total Demand ^e	876.5	895.4	902.9	899.1	907.4	943.5	950.1	962.0	1006.3	1030.1	1038.3	1045.3	1079.4	1085.8	1091.7
Discrepancy f	5.8	1.1	-3.5	-7.7	0.5	-7.0	3.9	-1.6	0.4	3.1	-6.7	-1.7	-0.7	-1.0	0.0

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^CEstimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^eTotal Demand includes estimated IPP consumption.

^fThe discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period. Prior to 1994, discrepancy may include some waste coal supplied to IPPs that has not been specifically identified.

Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121, and Electric Power Monthly, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

Table A8. Annual U.S. Electricity Supply and Demand

(Billion Kilowatt-hours)

							Year								
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Net Utility Generation															
Coal	1540.7	1553.7	1559.6	1551.2	1575.9	1639.2	1635.5	1652.9	1737.5	1787.8	1807.5	1767.7	1692.3	1720.2	1728.5
Petroleum	148.9	158.3	117.0	111.5	88.9	99.5	91.0	60.8	67.3	77.8	110.2	86.9	72.6	99.5	76.0
Natural Gas	252.8	266.6	264.1	264.2	263.9	258.9	291.1	307.3	262.7	283.6	309.2	296.4	289.8	273.9	281.5
Nuclear	527.0	529.4	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	725.0	705.4	670.4	664.3
Hydroelectric	222.9	265.1	279.9	275.5	239.6	265.1	243.7	293.7	328.0	337.2	304.4	293.9	247.5	2 4 8.3	268.1
Geothermal and Other a	12.0	11.3	10.7	10.1	10.2	9.6	8.9	6.4	7.2	7.5	7.2	3.7	2.2	2.2	2.2
Subtotal	2704.3	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3173.7	3009.8	3014.5	3020.8
Nonutility Generation b	NA	187.6	216.7	246.3	286.1	314.4	343.1	363.3	369.6	371.7	405.7	554.7	797.7	921.3	999.5
Total Generation	2704.3	2971.9	3024.9	3071.3	3083.4	3196.9	3253.8	3357.8	3447.0	3494.2	3617.9	3728.4	3807.4	3935.8	4020.3
Net Imports ^c	31.8	11.0	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	27.6	30.6	35.6	36.2	35.9
Total Supply	2736.0	2982.8	3027.2	3091.0	3108.8	3224.7	3298.6	3397.1	3485.0	3530.8	3645.5	3759.0	3843.0	3972.0	4056.3
Losses and Unaccounted for ^d	NA	243.2	207.3	215.0	223.6	236.4	225.7	238.4	239.0	237.0	225.0	261.5	218.6	264.9	270.2
Demand															
Retail Sales ^e															
Residential	892.9	905.5	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1188.9	1223.5	1243.2
Commercial	699.1	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1035.6	1054.0	1080.1
Industrial	896.5	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1078.7	1082.1	1102.2
Other	89.6	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	111.5	110.7	112.3
Subtotal	2578.1	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3414.6	3470.2	3537.8
Nonutility Use/Sales ^f	NA	92.9	107.3	113.9	121.8	126.9	138.4	145.4	144.9	148.2	156.2	185.3	209.9	236.9	248.2
Total Demand	NA	2739.7	2819.9	2875.9	2885.2	2988.4	3073.0	3158.7	3246.0	3293.8	3420.5	3497.4	3624.4	3707.1	3786.0
Memo:															
Nonutility Sales															
to Electric Utilities	NA	94.7	109.4	132.4	164.4	187.5	204.7	217.9	224.7	223.5	249.5	369.4	587.8	684.4	751.3

^aOther includes generation from wind, wood, waste, and solar sources.

^bNet generation.

^cData for 2000 are estimates.

^dBalancing item, mainly transmission and distribution losses.

^eTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*.

¹Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA 860B, "Annual Electric Generator Report - Nonutility" (1998 and 1999) and EIA-867, "Annual Nonutility Power Producer Report," (prior to 1998). Data for 2000 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following report: Electric Power Monthly, DOE/EIA-0226 and Electric Power Annual, DOE/EIA-0348. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.